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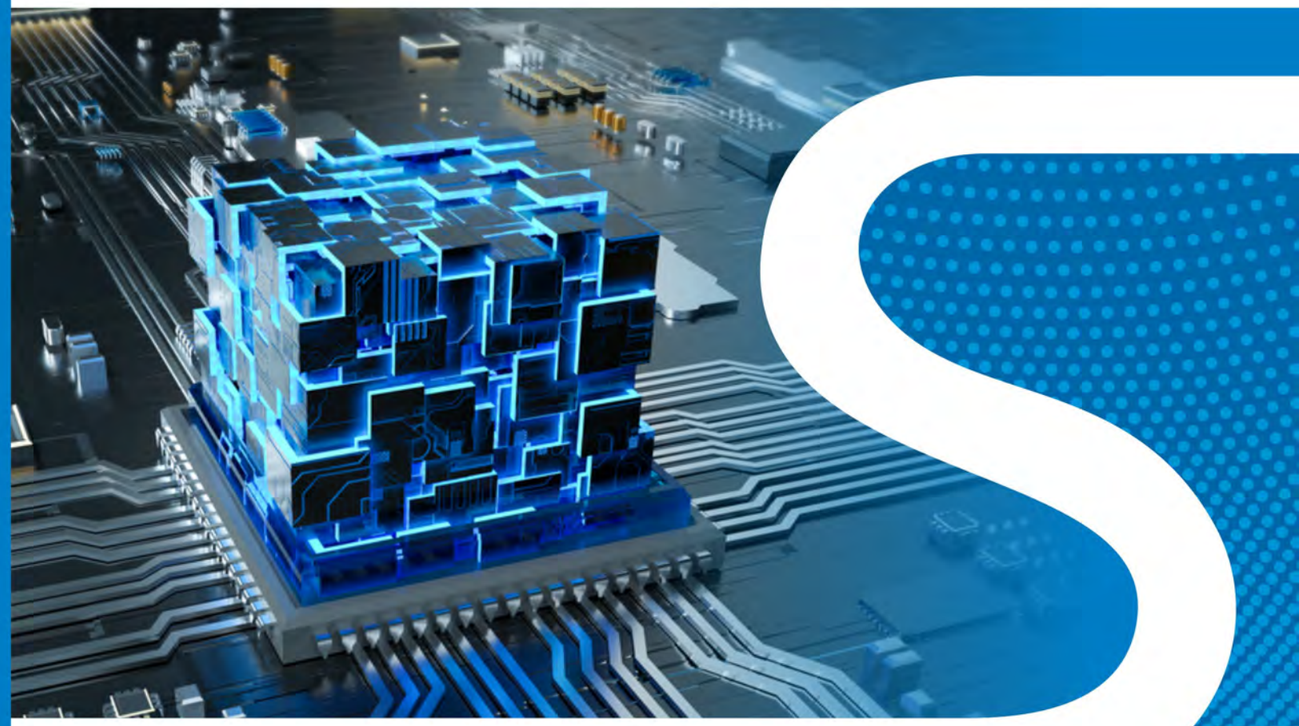

功率保护解决方案
Power Protection Solutions

江苏晟驰微电子有限公司
Jiangsu Semicon Champion Microelectronics Co., Ltd.

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PROTECTION AND POWER DEVICES

ESD WITH AUTOMOTIVE GRADE

POWER TVS FROM 200W-30KW

AUTOMOTIVE POWER TVS

LOW CLAMPING CAPABILITY TVS

ZENER DIODE

SIDAC&TSS

SCR DEVICES

SCHOTTKY BARRIER DIODE

Jiangsu Semicon Champion Microelectronics Co., Ltd.

SCME

COMPANY PROFILE 企业简介

江苏晟驰微电子有限公司成立于2017年，是一家集自主研发、生产、销售、服务于一体的国家高新技术企业。产品线涵盖TVS二极管、TSS浪涌吸收器、ESD保护器、THYRISTOR可控硅、SIDAC触发管、SBD肖特基、STD整流二极管、MOSFET等功率保护器件，为客户提供全套解决方案。产品广泛应用于汽车、家电、新能源、通信、数码、工业、医疗等多个领域。

公司荣获国家级专精特新“小巨人”企业、国家级高新技术企业、江苏省专精特新中小企业、江苏省先进级智能制造工厂、江苏省五星级上云企业、江苏省AA级两化融合企业、江苏省民营科技企业、江苏省科技型中小企业、南通市工程技术研究中心、南通市市级企业技术中心、南通市两化融合创新试点示范企业、海安市质量标兵等；并先后通过了IATF16949、ISO9001、ISO14001、QC080000等国际认证。公司注重研发与创新，目前已拥有发明专利38项、集成电路布图设计1项、实用新型专利9项，软著1项，并与多家重点院校建立了长期的产学研合作关系。

公司积极参加国家级创新创业大赛并多次取得优秀成绩，例如：荣获第六届“创客中国”中小企业创新创业大赛全国500强、江苏省二等奖、南通市一等奖，入围第十一届中国创新创业大赛全国行业赛，并被评为全国优秀企业。

晟驰致力于成为功率保护解决方案领导厂商，为全球客户提供高性能、高可靠性、卓越品质、创新领先的功率保护解决方案。

Jiangsu Semicon Champion Microelectronics Co., Ltd., founded in 2017, is a national high-tech enterprise integrating R&D, production, sales, and service. Its product line covers a range of power protection devices, including TVS diodes, TSS surge absorbers, ESD protectors, THYRISTOR silicon-controlled rectifiers, SIDAC triggering devices, SBD Schottky diodes, STD rectifier diodes, and MOSFETS, providing customers with comprehensive solutions. The products are widely used in various fields such as automotive, home appliances, new energy, communications, digital electronics, industrial applications, and healthcare.

The company has been recognized with numerous honors and certifications, including National-level Specialized, Refined, Distinctive, and Innovative "Little Giant" Enterprise, National High-Tech Enterprise, Jiangsu Provincial Specialized, Refined, Distinctive, and Innovative SME, Jiangsu Provincial Advanced Intelligent Manufacturing Plant, Jiangsu Provincial Five-Star Cloud Enterprise, Jiangsu Provincial AA-Level Integration of Informatization and Industrialization Enterprise, Jiangsu Provincial Private Hi-Tech Enterprise, Jiangsu Provincial Hi-Tech SME, Nantong City Engineering Technology Research Center, Nantong City Municipal Enterprise Technology Center, Nantong City Pilot Demonstration Enterprise for Integration of Informatization and Industrialization Innovation, and Haian City Quality Benchmark. It has also obtained international certifications such as IATF16949, ISO9001, ISO14001, and QC080000. The company places strong emphasis on R&D and innovation, currently holding 38 invention patents, 1 integrated circuit layout design, 9 utility model patents, and 1 software copyright. It has established long-term industry-university-research partnerships with several key universities and research institutions.

The company actively participates in national-level innovation and entrepreneurship competitions and has achieved outstanding results multiple times. For example, it was honored as Top 500 of national finals in the 6th "Maker China" SME Innovation and Entrepreneurship Competition, winning the second prize in Jiangsu Province and the first prize in Nantong City. It also advanced to the national industry finals of the 11th China Innovation and Entrepreneurship Competition and was recognized as a National Outstanding Enterprise.

The company is committed to becoming a leading provider of power protection total solutions, delivering high-performance, high-reliability, superior-quality, and innovative power protection solutions to global customers.

ESD Protection Devices

Part Number	Package	Protected Lines	Peak Power Dissipation P_{PK}(W)	Reverse Standoff Voltage V_{RWM}(V)	ESD (kV)	Breakdown Voltage(V)	Maximum Clamping Voltage V_C(V)	Maximu I_{PP}(A)	Junction Capacitance C_J(pF)	Internal Structure
CSL05LBB	DFN0603-2L	1	80	5	20-25	6.5-8	20	4	0.22	Fig.7
CSL05LBD	DFN0603-2L	1	80	5	25	6-9	16	5	0.3	Fig.1
CSL03LBZ	DFN0603-2L	1	100	3.3	15-20	5-8	20	4	0.35	Fig.7
CSL05LB	DFN0603-2L	1	80	5	10-15	6	14	4	0.35	Fig.1
CSH05LBX	DFN0603-2L	1	70	5	25	6-9	25	4	0.35-0.5	Fig.1
CSL05LBX	DFN0603-2L	1	100	5	8-15	6-9	25	4	0.35-0.5	Fig.1
CSL05LU	DFN0603-2L	1	80	5	10-15	6-9	25	4	0.6	Fig.3
CSLS03LBZ	DFN0603-2L	1	50	3.3	30		5	10	0.6	Fig.7
CSL24LBD	DFN0603-2L	1	78	24	17-20	26.4	39	2	1.2-1.6	Fig.1
CSH12LB	DFN0603-2L	1	80	12	25	13.5	25	6	7	Fig.1
CSH12LBB	DFN0603-2L	1	195	12	30	14-18	32	6	8	Fig1
CSH08LB	DFN0603-2L	1	80	8	25	9	16	6	10	Fig.1
CSH05LB	DFN0603-2L	1	80	5	25	6	10	8	12	Fig.1
CSH24LBD	DFN0603-2L	1	150	24	15	27	50	3	12-15	Fig.1
CSH05LBS	DFN0603-2L	1	70	5	25	6.5-8.4	10	7	15-18	Fig1
CSH07LBZ	DFN0603-2L	1	84	7	30	7.2-8	14	6	15-21	Fig.1
CSES03LWB	DWN0603-2L	1	35	3.3	10-15	8	8	7	0.14-0.2	Fig.1
CSUS05LWB	DWN0603-2L	1	35	5	10-15	10	8	7	0.14-0.2	Fig.1
CSES05LWB	DWN0603-2L	1	35	5	10-15	10	6.5	6.5	0.17-0.2	Fig.1
CSLXXFBZ	DFN1006-2L	1	50-105	15-36	8-25	16.5-37	24-72	2-16	0.25-0.35	Fig.7
CSL03FBZ	DFN1006-2L	1	100	3.3	25	4.5-10	17-31	5	0.25-0.45	Fig.7
CSL05FBX	DFN1006-2L	1	100	5	8-15	6	25	4	0.35	Fig.1
CSL05FUB	DFN1006-2L	1	60	5	20-25	6-7	14	4	0.45-0.8	Fig.7
CSL05F2U3	DFN1006-2L	1	80	5	10-15	6-9	25	4	0.6	Fig.15
CSLSXXFBZ	DFN1006-2L	1	35-40	3-24	15-30	8-32	5-8	5-10	0.5-0.7	Fig.7
ESDB05DFA	DFN1006-2L	1	60	5	30	5.6-8.5	7.2-12	8	15-18	Fig.7
CSH05FBJ	DFN1006-2L	1	100	5	30	6-9	11	8	15-20	Fig.7
CSHxxFB	DFN1006-2L	1	100	3.3-24	30	3.6-26	10-48	5-8	10-80	Fig.1
CSHxxFBA	DFN1006-2L	1	100	3.3-24	30	3.6-26	10-48	5-8	10-20	Fig.1
CSH12FBB	DFN1006-2L	1	110	12	30	13	18	6	10	Fig.7
CSHXXFBX	DFN1006-2L	1	250-360	12-36	30	13.3-45.7	30-70	3.6-12	10	Fig.1
CSH24FBL	DFN1006-2L	1	250	24	30	27-30.8	51	40	16	Fig.1
CSH36FBZ	DFN1006-2L	1	244	36	30	38.5	61	4	17	Fig.7
CSHS04FBC	DFN1006-2L	1	120	4.5	30	4.6	8.6	15	19	Fig.1
CSH18FBT	DFN1006-2L	1	150	18	30	19-24	31	5	22	Fig.3
CSH05FBB	DFN1006-2L	1	150	5	30	6	10	15	25	Fig.1
CSH07FUD	DFN1006-2L	1	210	7	30	7.5	15	14	100	Fig.3
CSH07FUZX	DFN1006-2L	1	560	7	30	7.3-9.5	14	40	260	Fig.3
CSHS04FBD	DFN1006-2L	1	600	4.5	30	4.8	10	60	120	Fig.1
CSHS05FBE	DFN1006-2L	1	1000	5	30	5.5	10	90	200	Fig.1
CSHxxFU	DFN1006-2L	1	300	3.3-36	30	4-37.9	18-70	5-24	40-200	Fig.3
CSHXXFUZ	DFN1006-2L	1	220-560	6-36	25-30	7-38	9-75	4-40	30-260	Fig.13
CSL05H2U6	DFN1610-6L	4	60	5	12-17	6-9.5	15	4	0.3-0.8	Fig.9
SC1811P1	DFN1610-2L	1	300	18	30	20	26-42	7	20	Fig.7
CSHxxHUB	DFN1610-2L	1	1500	4.5-36	30	4.8-39	15-70	10-180	160-500	Fig.3
CSHxxHU	DFN1610-2L	1	2000	5-24	30	6-26	17-50	25-110	200-860	Fig.3
CSH04HBZ	DFN1610-2L	1	2210	4.5	30	4.8	17	130	300	Fig.7

Part Number	Package	Protected Lines	Peak Power Dissipation P_{PK}(W)	Reverse Standoff Voltage V_{RWM}(V)	ESD (kV)	Breakdown Voltage(V)	Maximum Clamping Voltage V_C(V)	Maximu I_{PP}(A)	Junction Capacitance C_J(pF)	Internal Structure
CSLS05G4U	DFN2510P10	4	34	5	15	10	4.5	4.5	8	Fig.4
CSLS03G4U	DFN2510P10	4	50	3.3	15-20	8.5	4.5	4.5	8	Fig.4
CSH04W2B3	DFN2X2-3L	1	5000	4.5	30	4.8	17	17	300	Fig.18
CSHXXW2U3	DFN2X2-3L	1	5000-6000	4-48	30	4.8-58	85	85	60-290	Fig.19
CSHSXXW2U3	DFN2X2-3L	1	5000-6000	10-24	30	11-30	17-35	17-35	180-200	Fig.19
CSH07W2U3Z	DFN2X2-3L	1	5500	7	30	7.5	22	22	250	Fig.19
CSL05BB	SOD-523	1	80	5	10-15	6	18	18	4	Fig.1
CSL05BU	SOD-523	1	75	5	10-15	6.5	14	14	4	Fig.3
CSLXXBBD	SOD-523	1	40	15-24	8-15	16.5-26.4	28-43	28-43	1-1.4	Fig.10
CSLXXBUD	SOD-523	1	40	15-24	8-15	16.5-26.4	28-43	28-43	1-1.4	Fig.11
CSHxxBB	SOD-523	1	90	3.3-12	30	3.6-13	9-20	9-20	6-10	Fig.1
CSHxxBBL	SOD-523	1	90	3.3-12	30	3.6-13	9-20	9-20	6-10	Fig.1
ESDB05D5	SOD-523	1	100	5	30	5.5-8.5	13	13	8	Fig.7
CSHxxBU	SOD-523	1	300	3.3-36	30	4-40	18-75	18-75	5-24	Fig.13
CSL12CBZ	SOD-323	1	400	12	30	14-16.5	30	30	15	Fig.10
CSL03CBA	SOD-323	1	400	3.3	30	4	8.5	8.5	25	Fig.10
CSLxxCB	SOD-323	1	300	3.3-24	30	4-26	8.5-34	8.5-34	4-17	Fig.10
CSLxxCBB	SOD-323	1	200	3.3-36	30	4-38	8-55	8-55	40	Fig.10
CSLxxCU	SOD-323	1	300	3.3-24	30	4-26	8.5-34	8.5-34	4-17	Fig.11
CSL03CBD	SOD-323	1	340	3.3	30	4	4	4	21	Fig.10
CSM05CBB	SOD-323	1	350	5	25	6	32	32	21	Fig.10
CSH24CBA	SOD-323	1	400	24	30	25.5	50	50	9	Fig.1
ESDB24D3	SOD-323	1	400	24	30	26.7	50	50	8	Fig.1
CSH12CBD	SOD-323	1	550	12	30	13.3	26	26	22	Fig.1
ESDB05D3	SOD-323	1	400	5	30	5.5	9	9	35	Fig.1
CSHXXCB	SOD-323	1	350	3.3-36	30	3.5-38	7.5-60	7.5-60	3-25	Fig.1
CSHxxCU	SOD-323	1	300	3.3-380	30	4-400	18-480	18-480	40	Fig.13
ESD12D3	SOD-323	1	350	12	30	13.3-16	24	24	15	Fig.13
CSH05CBD	SOD-323	1	600	5	30	6	15	15	45	Fig.1
CSH03CUA	SOD-323	1	500	3.3	30	4.8	16	16	35	Fig.3
CSH04CBE	SOD-323	1	2400	4.5	30	5.1	15	15	160	Fig.1
CSH04CBZ	SOD-323	1	2380	4.5	30	4.7	17	17	140	Fig.7
CSHxxCUB	SOD-323	1	1500	4.5-24	30	5.0-26	15-50	15-50	40	Fig.3
CSHxxCUX	SOD-323	1	1500	4.5-24	30	5.0-26	15-50	15-50	40	Fig.3
ESD12D3	SOD-323	1	350	12	30	13.3-16	24	24	15	Fig.13
CSL05D4U	SOT23-6L	4	60	5	12-17	6	12	12	4.5	Fig.14
CSL05D4UB	SOT23-6L	4	80	5	20	6	16	16	5.5	Fig.14
CSLN05D4U-T2	SOT23-6L	4	70	5	30	7	8	8	6	Fig.14
SRV05-4D	SOT23-6L	4	600	5	30	6	20	20	25	Fig.14
CSL05D2U	SOT23-6L	4	60	5	12-17	9.5	15	15	4	Fig.14
SRV05-4DX	SOT23-6L	4	350	5	30	7-9.5	14	14	25	Fig.14
SRV05-4L	SOT23-6L	4	480	5	30	6	20	20	24	Fig.14

ESD Protection Devices

Part Number	Package	Protected Lines	Peak Power Dissipation P_{PK}(W)	Reverse Standoff Voltage V_{RWM}(V)	ESD (kV)	Breakdown Voltage(V)	Maximum Clamping Voltage V_C(V)	Maximu I_{PP}(A)	Junction Capacitance C_J(pF)	Internal Structure
CSL05E2U	SOT-23	2	60	5	10-15	6	15	4	0.5	Fig.8
ESDB24T2B	SOT-23	2	350	24	30	26.7	60	6	15	Fig.8
CSHxxE2B	SOT-23	2	350	3.3-36	30	4.5-38	21-75	4-24	30-135	Fig.2
CSHxxE2U	SOT-23	2	350	3.3-36	30	4-38	15-65	4-25	50-200	Fig.8
CSH12E2UX	SOT-23	2	360	12	30	12.5	24	20	90	Fig.8
CSH12E4U	SOT-23	2	360	12	30	12.5	24	20	90	Fig.8
CSH12E2UA	SOT-23	2	500	12	30	13.3	30	20	110	Fig.8
CSH03E2UB	SOT-23	2	300	3.3	30	4.8	16	40	320	Fig.8
CSL03Q4U	SOT-363	4	8-15	3.3	12-17	4.5	15	4	0.4-0.8	Fig.14
CSL05J2U	SOT-143	4	120	5	20	6	15	8	0.6-1.2	Fig.9
CSL05J2UA	SOT-143	4	70	5	13-15	6	17	4	0.6-1.2	Fig.9
CSL15JB	SOT-143	1	400	15	30	16.5	24-32	12	0.8	Fig.10
CSH05J2UD	SOT-143	4	550	5	30	6	20	30	2-4	Fig.9
SLVU2.8-4BTG	SO-8	4	600	2.8	30	2.8	20	30	2	Fig.16
SLVU2.8-8BTG	SO-8	4	600	2.8	30	2.8	20	30	2	Fig.16
LC03-3.3	SO-8	4	1800	3.3	15	2.8	18	100	7.5-15	Fig.21
SP03-6BTG	SO-8	4	3500	6	30	6.8	25	150	4-13	Fig.21
CSL05MU-W	SOD-923	1	100	5	8-15	6	20	4.5	0.5-0.8	Fig.3
CSHxxMB	SOD-923	1	80	3.3-5	25	3.7-6	10-11	6	12-15	Fig.1
CSL05Q4U	SOT-363	5	60	5	12-17	6	15	4.5	0.3-0.6	Fig.4
CSH05Q5U	SOT-363	4	100	5	30	6	15	8	100	Fig.14
CSL05S2U	SOT-563	4	60	5	12-17	6	12	4.5	0.3-0.6	Fig.14
CSL05T2U	SOT-523	2	60	5	15	6	15	4	0.6	Fig.8
CSL05Y4U	SOT-553	2	60	5	12-17	5	12	4.5	0.3-0.6	Fig.2
ASL05LU	DFN0603-2L	1	80	5	15	6	25	4	0.6	Fig.3
ASL05FB	DFN1006-2L	1	80	5	10-15	6	18	4	0.35	Fig.1
ASL24FB	DNF1006-2L	1	80	24	10-15	26.5	53	1.5	0.3	Fig.1
ASL05FBA	DNF1006-2L	1	50	5	10-15	7	25	4	0.6	Fig.1
ASHS04FBC	DNF1006-2L	1	120	4.5	30	4.6	6.1	6	19	Fig.1
ASHXXFB	DFN1006-2L	1	80-240	3.3-24	30	3.6-26	10-48	5-8	15-20	Fig.1
ASHXXFU	DNF1006-2L	1	300	3.3-36	30	4-38	8.5-50	18-70	5-24	Fig.3
ASL05H2U6	DFN1610-6L	4	60	5	12-17	9.5	15	4	0.8	Fig.9
ASL05G4U	DFN2510P10	4	60	5	20	6	21.5	4	0.45	Fig.4
ASLXXE2B	SOT-23	1	220-380	3.3-24	25	4.5-26	20-55	4-19	0.8	Fig.12
ASH24E2BQ	SOT-23	2	200	24	30	30.3	55	4	10	Fig.20
ASH24E2BA	SOT-23	2	400	24	30	25.5	50	9	30	Fig.20
ASH712E2B	SOT-23	2	350	12	30	13.3	19	17	55	Fig.2
ASH05E2UA	SOT-23	2	500	5	30	6-9	17	30	110	Fig.8
ASHXXE2B	SOT-23	2	350	3.3-36	30	4.5-38	21-75	3-24	25-135	Fig.20
ASHXXE2U	SOT-23	1	260-375	3.3-36	30	4-38	15-65	4-25	50-200	Fig.8
ASHXXBB	SOD-523	1	90	3.3-24	30	3.6-26.7	9-45	2-10	8-18	Fig.1
ASHXXBU	SOD-523	1	300	3.3-36	30	4-38	8.5-50	5-24	40-200	Fig.3
ASLXXCB	SOD-323	1	220-340	3.3-24	30	4-26	20-55	4-17	0.8	Fig.10
ASLXXCU	SOD-323	1	220-340	3.3-24	30	4-26	20-55	4-17	0.8	Fig.11
ASHXXCB	SOD-323	1	225-400	3.3-36	30	3.5-38	16-75	3-25	25-150	Fig.7
ASHXXCU	SOD-323	1	280-456	3.3-36	30	4-38	8-55	4-24	50-300	Fig.3
ASL05MU	SOD-923	1	60	5	10-15	6	14	4	0.5	Fig.3
ASL05MB	SOD-923	1	30	5	8-15	6.5	15	2	0.6	Fig.1
ASHxxxMB	SOD-923	1	80	3.3-5	25	3.6-5	10-11	7-8	15	Fig.1
		1								
		1								

Internal Structure


Fig.1

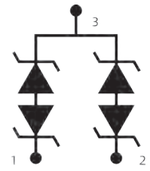


Fig.2


Fig.3

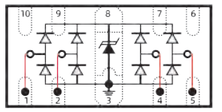


Fig.4

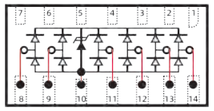


Fig.5

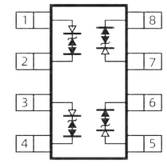


Fig.6

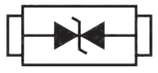


Fig.7

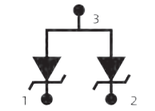


Fig.8

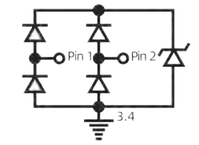


Fig.9

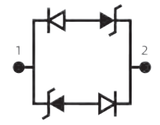


Fig.10

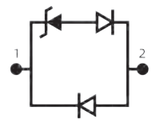


Fig.11

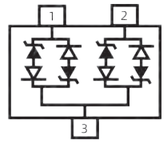


Fig.12


Fig.13

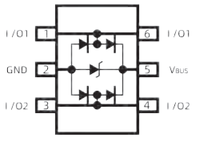


Fig.14

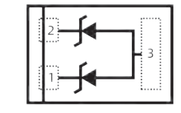


Fig.15

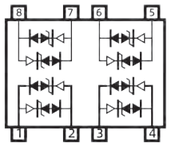


Fig.16

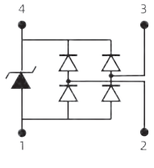


Fig.17

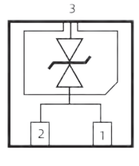


Fig.18

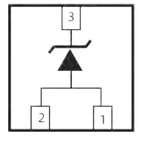


Fig.19

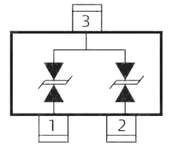


Fig.20

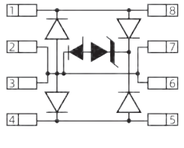


Fig.21

200W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
SMF3.3A-SMF200A	Unidirectional	SOD-123FL	200	3.3-200	1-200	76.3-324	0.6-27.4	5.2-224	6-247
SMF3.3CA-SMF200CA	Bidirectional	SOD-123FL	200	3.3-200	1-200	76.3-324	0.6-27.4	5.2-224	6-247
SMF350A	Unidirectional	SOD-123FL	200	350	1	560	0.36	391	432

400W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
P4KE6.8A-P4KE550A	Unidirectional	DO-41	400	5.8-468	1-1000	10.5-760	0.79-39	6.45-522.5	7.14-577.5
P4KE6.8CA-P4KE550CA	Bidirectional	DO-41	400	5.8-468	1-1000	10.5-760	0.79-39	6.45-522.5	7.14-577.5
P4SMA6.8A-P4SMA600A	Unidirectional	SMA	400	5.8-513	1-1000	10.5-828	0.48-39	6.45-570	7.14-630
P4SMA6.8CA-P4SMA600CA	Bidirectional	SMA	400	5.8-513	1-1000	10.5-828	0.48-39	6.45-570	7.14-630
SMA4L5.0A-SMA4L85A	Unidirectional	SMAF	400	5-85	1-100	9.2-137	2.9-43.5	6.4-94.4	7-104
SMA4L5.0CA-SMA4L85CA	Bidirectional	SMAF	400	5-85	1-100	9.2-137	2.9-43.5	6.4-94.4	7-104
SMAJ5.0A-SMAJ440A	Unidirectional	SMA	400	5-440	1-400	9.3-713	0.6-43.5	6.4-492	7-543
SMAJ5.0CA-SMAJ440CA	Bidirectional	SMA	400	5-440	1-400	9.3-713	0.6-43.5	6.4-492	7-543
SMF4L3.3A-SMF4L85A	Unidirectional	SOD-123FL	400	3.3-85	1-400	8-137	2.9-50	5.2-94.4	6.0-104
SMF4L3.3CA-SMF4L380CA	Bidirectional	SOD-123FL	400	3.3-380	0.5-400	8-625	0.5-50	5.2-427	6.5-459
TP4KE6.8A-TP4KE300A	Unidirectional	DO-41	400	5.8-256	1-1000	10.5-414	1-39	6.45-285	7.14-315
TP4KE6.8CA-TP4KE300CA	Bidirectional	DO-41	400	5.8-256	1-1000	10.5-414	1-39	6.45-285	7.14-315
TP4KE350A-TP4KE550A	Unidirectional	DO-41	400	300-468	1	482-760	0.79-1.3	332-522.5	368-577.5
TP4KE110CA-TP4KE550CA	Bidirectional	DO-41	400	94-468	1	152-760	0.78-4	105-522.5	116-577.5
TPSMAJ5.0A-TPSMAJ70A	Unidirectional	SMA	400	5-70	1-400	9.2-113	3.6-43.5	6.4-77.8	7-86
TPSMAJ5.0CA-TPSMAJ70CA	Bidirectional	SMA	400	5-70	1-400	9.2-113	3.6-43.5	6.4-77.8	7-86
TPSMF4L3.3A-TPSMF4L85A	Unidirectional	SOD-123FL	400	3.3-85	1-800	8-137	2.9-50	5.7-94.4	6.5-104
TPSMF4L3.3CA-TPSMF4L85CA	Bidirectional	SOD-123FL	400	3.3-85	1-800	8-137	2.9-50	5.7-94.4	6.5-104

600W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
P6KE6.8A-P6KE600A	Unidirectional	DO-15	600	5.8-512	1-1000	10.5-828	0.75-58.1	6.45-570	7.14-630
P6KE6.8CA-P6KE600CA	Bidirectional	DO-15	600	5.8-512	1-1000	10.5-828	0.75-58.1	6.45-570	7.14-630
SMA6J5.0A-SMA6J130A	Unidirectional	SMA	600	5-130	1-800	9.2-209	2.9-66.0	6.4-144	7-159
SMA6J5.0CA-SMA6J90CA	Bidirectional	SMA	600	5-90	1-800	9.2-146	4.2-66.0	6.4-100	7-111
SMBJ5.0A-SMBJ440A	Unidirectional	SMB	600	5-440	1-800	9.2-713	0.9-65.3	6.4-492	7-543
SMBJ5.0CA-SMBJ440CA	Bidirectional	SMB	600	5-440	1-800	9.2-713	0.9-65.3	6.4-492	7-543
P6SMB6.8A-P6SMB600A	Unidirectional	SMB	600	5.8-513	1-1000	10.5-828	0.72-58.1	6.45-570	7.14-630
P6SMB6.8CA-P6SMB600CA	Bidirectional	SMB	600	5.8-513	1-1000	10.5-828	0.72-58.1	6.45-570	7.14-630
SMA6L3.3A-SMA6L85A	Unidirectional	SMAF	600	3.3-85	1-800	7.3-137	4.4-82.2	5.2-94.4	6-104
SMA6L3.3CA-SMA6L85CA	Bidirectional	SMAF	600	3.3-85	1-800	7.3-137	4.4-82.2	5.2-94.4	6-104
SMA6J5.0A-H-SMA6J85A-H	Unidirectional	SMA	600	5-85	1-800	9.2-137	4.6-66	6.4-94.4	7-104
SMA6J5.0CA-H-SMA6J85CA-H	Bidirectional	SMA	600	5-85	1-800	9.2-137	4.6-66	6.4-94.4	7-104
TPSMA6L5.0A-TPSMA6L85A	Unidirectional	SMAF	600	5-85	1-800	9.2-137	4.4-65.3	6.4-94.4	7-104
TPSMB6.8A-TPSMB650A	Unidirectional	SMB	600	5.8-553	1-800	10.5-897	0.8-58.1	6.45-617.5	7.14-682.5
TPSMB6.8CA-TPSMB650CA	Bidirectional	SMB	600	5.8-553	1-800	10.5-897	0.8-58.1	6.45-617.5	7.14-682.5
TPSMB5.0A-VR-TPSMB440A-VR	Unidirectional	SMB	600	5-440	1-500	9.2-713	0.9-65.2	6.4-492	7-543
TPSMB5.0CA-VR-TPSMB440CA-VR	Bidirectional	SMB	600	5-440	1-500	9.2-713	0.9-65.2	6.4-492	7-543
SMBJ300A-DH-SMBJ460A-DH	Unidirectional	SMB	600	300-460	1	486-735	0.8-1.3	335-510	371-560
SMBJ300CA-DH-SMBJ460CA-DH	Bidirectional	SMB	600	300-460	1	486-735	0.8-1.3	335-510	371-560

1000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
10BJ10A-10BJ60A	Unidirectional	SMB	1000	10-60	45662	17-96.8	10.3-58.9	11.1-66.7	12.3-73.7
10BJ10CA-10BJ60CA	Bidirectional	SMB	1000	10-60	45662	17-96.8	10.3-58.9	11.1-66.7	12.3-73.7
1KSMB6.8A-1KSMB180A	Unidirectional	SMB	1000	5.8-153	1-900	10.5-246	4.1-95.2	6.45-171	7.14-189
1KSMB6.8CA-1KSMB180CA	Bidirectional	SMB	1000	5.8-153	1-900	10.5-246	4.1-95.2	6.45-171	7.14-189
SMBF15CA-n-SMBF40CA-n	Bidirectional	SMBF	1000	15-40	1	32-75	1000	16.7-44	18.5-49.1
TP1KSMB6.8A-TP1KSMB36A	Unidirectional	SMB	1000	5.8-30.8	1-900	10.5-49.9	20-95.2	6.45-34.2	7.14-37.8
TP1KSMB6.8CA-TP1KSMB36CA	Bidirectional	SMB	1000	5.8-30.8	1-900	10.5-49.9	20-95.2	6.45-34.2	7.14-37.8
TP1KSMB10A-VR-TP1KSMB60A-VR	Unidirectional	SMB	1000	10-60	1-5	17-96.8	10.3-58.9	11.1-66.7	12.3-73.7
TP1KSMB10CA-VR-TP1KSMB60CA-VR	Bidirectional	SMB	1000	10-60	1-5	17-96.8	10.3-58.9	11.1-66.7	12.3-73.7
TP1SMD75A-VBR-Un-TP1SMD91A-VBR-Un	Unidirectional	SMC	1000	64.1-77.8	1	80-97	8-9.7	71.3-86.5	78.8-95.5

1500W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
1.5KE6.8A-1.5KE600A	Unidirectional	DO-27	1500	5.8-512	1-1000	10.5-828	2.5-144.8	6.45-570	7.14-630
1.5KE6.8CA-1.5KE600CA	Bidirectional	DO-27	1500	5.8-512	1-1000	10.5-828	2.5-144.8	6.45-570	7.14-630
1.5SMB10A-1.5SMB62A	Unidirectional	SMB	1500	8.55-53	1-1000	14.5-85	10-109.8	9.5-58.9	10.5-65
1.5SMB10CA-1.5SMB62CA	Bidirectional	SMB	1500	8.55-53	1-1000	14.5-85	10-109.8	9.5-58.9	10.5-65
1.5SMC6.8A-1.5SMC600A	Unidirectional	SMC	1500	5.8-513		10.5-828	1.8-144.8	6.45-570	7.14-630
1.5SMC6.8CA-1.5SMC600CA	Bidirectional	SMC	1500	5.8-513		10.5-828	1.8-144.8	6.45-570	7.14-630
15BF10A-15BF85A	Unidirectional	SMBF	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
15BF10CA-15BF85CA	Bidirectional	SMBF	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
15BJ10A-15BJ85A	Unidirectional	SMB	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
15BJ10CA-15BJ85CA	Bidirectional	SMB	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
SMCJ5.0A-SMCJ440A	Unidirectional	SMC	1500	5-440	1-800	9.2-713	2.1-163	6.4-492	7-543
SMCJ5.0CA-SMCJ440CA	Bidirectional	SMC	1500	5-440	1-800	9.2-713	2.1-163	6.4-492	7-543
15BF10A-H-15BF85A-H	Unidirectional	SMBF	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
15BF10CA-H-15BF85CA-H	Bidirectional	SMBF	1500	10-85	1	17-137	11-88.2	11.1-94.4	12.3-104
TPSMC12A-TPSMC440A	Unidirectional	SMC	1500	10.2-378	1-5	16.7-602	2.5-91	11.4-418	12.6-426
TPSMC12CA-TPSMC440CA	Bidirectional	SMC	1500	10.2-378	1-5	16.7-602	2.5-91	11.4-418	12.6-426
TPSMC5.0A-VR-TPSMC200A-VR	Unidirectional	SMC	1500	5-200	1-800	9.2-321.1	4.7-163	6.4-224	7-247
TPSMC5.0CA-VR-TPSMC200CA-VR	Bidirectional	SMC	1500	5-200	1-800	9.2-321.1	4.7-163	6.4-224	7-247

3000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
3.0SMC20A-3.0SMC33A	Unidirectional	SMC	3000	20-33	1	42-70	365-570	22.2-36.7	24.5-40.6
3.0SMDJ58CA-n-3.0SMDJ78CA-n	Bidirectional	SMC	3000	58-78	2	70-101	23.8-32.1	64.4-86.7	71.2-95.8
3.0SMD75A-VBR-Un-3.0SMD100A-VBR-Un	Unidirectional	SMC	3000	64.1-85.5	1	85-114	20-29.1	71.3-95	78.8-105
30BF22A-30BF58A	Unidirectional	SMBF	3000	22-58	2	35.5-93.6	32.1-84.5	24.4-64.4	26.9-71.2
30BF22CA-30BF58CA	Bidirectional	SMBF	3000	22-58	2	35.5-93.6	32.1-84.5	24.4-64.4	26.9-71.2
30BJ20A-30BJ58A	Unidirectional	SMB	3000	20-58	2	32.4-93.6	32.1-92.6	22.2-64.4	24.5-71.2
30BJ20CA-30BJ58CA	Bidirectional	SMB	3000	20-58	2	32.4-93.6	32.1-92.6	22.2-64.4	24.5-71.2
3.0SMC6.8A-3.0SMC440A	Unidirectional	SMC	3000	5.8-376.2	1-1000	10.5-602	5-285.7	6.45-418	7.14-462
3.0SMC6.8CA-3.0SMC440CA	Bidirectional	SMC	3000	5.8-376.2	1-1000	10.5-602	5-285.7	6.45-418	7.14-462
SMDJ5.0A-SMDJ440A	Unidirectional	SMC	3000	5-440	2-800	9.2-713	5.7-326.1	6.4-492	7-543
SMDJ5.0CA-SMDJ440CA	Bidirectional	SMC	3000	5-440	2-800	9.2-713	5.7-326.1	6.4-492	7-543
TPSMD10A-TPSMD85A	Unidirectional	SMC	3000	10-85	1-3	17-137	21.9-176.5	11.1-94.4	12.3-104
TPSMD10CA-TPSMD85CA	Bidirectional	SMC	3000	10-85	1-3	17-137	21.9-176.5	11.1-94.4	12.3-104
TPSMD75A-VBR-TPSMD91A-VBR	Unidirectional	SMC	3000	64.1-77.8	2	103-126	23.8-29.1	71.3-86.5	78.8-95.5
TPSMD75A-VBR-Un-TPSMD100A-VBR-Un	Unidirectional	SMC	3000	64.1-85.5	1	85-114	20-29.1	71.3-95	78.8-114

5000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
5.0SMDJ5.0A-5.0SMDJ170A	Unidirectional	SMC	5000	5-170	5-800	9.2-275	18.2-543.5	6.4-189	7.0-209
5.0SMDJ5.0CA-5.0SMDJ170CA	Bidirectional	SMC	5000	5-170	5-800	9.2-275	18.2-543.5	6.4-189	7.0-209
5.0SMDJ36CA-n-5.0SMDJ120CA-n	Bidirectional	SMC	5000	36-120	2	39-155	32.2-128.2	40-133.4	44.2-147.4
5KP5.0A-5KP440A	Unidirectional	P600	5000	5-350	2-5000	9.2-585	8.7-554.3	6.4-391	7-433
5KP5.0CA-5KP440CA	Bidirectional	P600	5000	5-350	2-5000	9.2-585	8.7-554.3	6.4-391	7-433
5.0SMDJ5.0A-5.0SMDJ110A-H	Unidirectional	SMC	5000	5-110	1-750	9.2-177	28.3-543.5	6.4-122	7-135
5.0SMDJ5.0CA-5.0SMDJ110CA-H	Bidirectional	SMC	5000	5-110	1-750	9.2-177	28.3-543.5	6.4-122	7-135
SM5D22A-H -SM5D24A-H	Unidirectional	TO-263	5000	22-24	5	35.5-39	129-141	24.4-26.7	28-30.7
SLD18A-SLD45A	Unidirectional	R6	5000	18-45	2	70.2-174.7	29.2-72.7	20-50	22.1-55.3
SLD18CA-SLD45CA	Bidirectional	R6	5000	18-45	2	70.2-174.7	29.2-72.7	20-50	22.1-55.3
TP5.0SMD12A-TP5.0SMD100A	Unidirectional	SMC	5000	12-100	5-20	19.9-162	30.9-252	13.3-111	14.7-123
TP5.0SMD12CA-TP5.0SMD100CA	Bidirectional	SMC	5000	12-100	5-20	19.9-162	30.9-252	13.3-111	14.7-123
TP5.0SMDJ24CA-n-TP5.0SMDJ78CA-n	Bidirectional	SMC	5000	24-78	2	26-101	39.7-129	26.7-86.7	29.5-95.8

6600W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
6.6SMDJ12A-6.6SMDJ90A	Unidirectional	SMC	6600	12-90	5-800	19.9-146	45.2-331.7	13.3-100	14.7-111
6.6SMDJ12CA-6.6SMDJ90CA	Bidirectional	SMC	6600	12-90	5-800	19.9-146	45.2-331.7	13.3-100	14.7-111
SM8S10A-SM8S90A	Unidirectional	DO-218AB	6600	10-90	5-20	17-146	45.2-388	11.1-100	12.3-111
SM8S10CA-SM8S90CA	Bidirectional	DO-218AB	6600	10-90	5-20	17-146	45.2-388	11.1-100	12.3-111
SM8S10A-H-SM8S60A-H	Unidirectional	DO-218AB	6600	10-60	5-20	17-96.8	68.2-388	11.1-66.7	12.3-73.7
SM8S10CA-H-SM8S60CA-H	Bidirectional	DO-218AB	6600	10-60	5-20	17-96.8	68.2-388	11.1-66.7	12.3-73.7
SM8S22CA-n-SM8S36CA-n	Bidirectional	DO-218AB	6600	22-36	2	24-39	114-186	24.4-40	26.9-44.2
SMEJ24AG	Unidirectional	DO-218AB	6600	24	5	38.9	170	26.7	29.5
TP6.6SMDJ12A-TP6.6SMDJ90A	Unidirectional	SMC	6600	12-90	5-800	19.9-146	45.2-331.7	13.3-100	14.7-111
TP6.6SMDJ12CA-TP6.6SMDJ90CA	Bidirectional	SMC	6600	12-90	5-800	19.9-146	45.2-331.7	13.3-100	14.7-111

7000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
SM7D27A-H	Unidirectional	TO-263	7000	23	5	39	180	25	29

8000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
8.0SMDJ12A-8.0SMDJ110A	Unidirectional	SMC	8000	12-110	5-800	19.9-177	45.2-402.1	13.3-122	14.7-135
8.0SMDJ12CA-8.0SMDJ110CA	Bidirectional	SMC	8000	12-110	5-800	19.9-177	45.2-402.1	13.3-122	14.7-135
8KPA5.0A-8KPA43A	Unidirectional	P600	8000	5-43	2-5000	9.2-69.4	117.6-886.9	6.4-47.8	7-52.8
8KPA5.0CA-8KPA43CA	Bidirectional	P600	8000	5-43	2-5000	9.2-69.4	117.6-886.9	6.4-47.8	7-52.8
SLD8K20A-SLD8K43A	Unidirectional	P600	8000	20-43	2	32.4-69.4	115.3-246.9	22.2-47.8	24.5-52.8
SLD8K20CA-SLD8K43CA	Bidirectional	P600	8000	20-43	2	32.4-69.4	115.3-246.9	22.2-47.8	24.5-52.8
SM8S10A-T-SM8S60A-T	Unidirectional	DO-218AB	8000	10-60	5-20	17-96.8	82.6-470.6	11.1-66.7	12.3-73.7
SM8S10CA-T-SM8S60CA-T	Bidirectional	DO-218AB	8000	10-60	5-20	17-96.8	82.6-470.6	11.1-66.7	12.3-73.7
TP8.0SMD75A-TP8.0SMD91A	Unidirectional	SMC	8000	64.1-77.8	5	103-126	63.5-77.7	71.3-86.5	78.8-95.5
TP8.0SMD75CA-TP8.0SMD91CA	Bidirectional	SMC	8000	64.1-77.8	5	103-126	63.5-77.7	71.3-86.5	78.8-95.5
TP8.0SMDJ12A-TP8.0SMDJ110A	Unidirectional	SMC	8000	12-110	5-800	19.9-177	45.2-402.1	13.3-122	14.7-135
TP8.0SMDJ12CA-TP8.0SMDJ110CA	Bidirectional	SMC	8000	12-110	5-800	19.9-177	45.2-402.1	13.3-122	14.7-135

10000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
10KPA20A-10KPA60A	Unidirectional	P600	10000	20-60	2-150	32.4-96.8	103.3-308.6	22.2-66.7	24.5-73.7
10KPA20CA-10KPA60CA	Bidirectional	P600	10000	20-60	2-150	32.4-96.8	103.3-308.6	22.2-66.7	24.5-73.7

15000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
15KPA17A-15KPA280A	Unidirectional	R6	15000	17-280	2-5000	29.3-454.5	33.2-515.4	18.99-312.8	20.79-342.4
15KPA17CA-15KPA280CA	Bidirectional	R6	15000	17-280	2-5000	29.3-454.5	33.2-515.4	18.99-312.8	20.79-342.4
SLD15K17A-SLD15K280A	Unidirectional	R6	15000	17-280	10-5000	29.3-452	33-512	18.9-311	20.79-342.4
SLD15K17CA-SLD15K280CA	Bidirectional	R6	15000	17-280	10-5000	29.3-452	33-512	18.9-311	20.79-342.4
SLD15K17A-T-SLD15K 60A-T	Unidirectional	R6	15000	17-60	2-5000	29.3-97.4	155-515.4	18.99-67	20.79-73.4
SLD15K17CA-T-SLD15K 60CA-T	Bidirectional	R6	15000	17-60	2-5000	29.3-97.4	155-515.4	18.99-67	20.79-73.4

30000W TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
30KPA28A-30KPA360A	Unidirectional	R6	30000	28-360	2-5000	50-640	47.3-606	31.28-402.1	34.41-440.3
30KPA28CA-30KPA360CA	Bidirectional	R6	30000	28-360	2-5000	50-640	47.3-606	31.28-402.1	34.41-440.3
30KPA28A-H-30KPA360A-H	Unidirectional	R6	30000	28-360	2-5000	50-640	47.3-606	31.28-402.1	34.41-440.3
30KPA28CA-H-30KPA360CA-H	Bidirectional	R6	30000	28-360	2-5000	50-640	47.3-606	31.28-402.1	34.41-440.3

SCAK/SMAK Package TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
SCAK1-076C-SCAK1-430C	Bidirectional	AK	-	76-430	10	140-625	1000	85-440	95-490
SCAK3-015C-SCAK3-560C	Bidirectional	AK	-	15-560	10	28-790	3000	16-585	19-650
SCAK6-015C-SCAK6-560C	Bidirectional	AK	-	15-560	10	28-790	6000	16-585	19-650
SCAK10-015C-SCAK10-560C	Bidirectional	AK	-	15-560	10	28-790	10000	16-585	19-650
SCAK15-030C-SCAK15-380C	Bidirectional	AK	-	30-380	10	90-520	15000	32-401	37-443
SCAK1-076C-SCAK1-430C-Y	Bidirectional	AK	-	76-430	10	140-625	1000	85-440	95-490
SCAK3-015C-SCAK3-560C-Y	Bidirectional	AK	-	15-560	10	28-790	3000	16-585	19-650
SCAK6-015C-SCAK6-560C-Y	Bidirectional	AK	-	15-560	10	28-790	6000	16-585	19-650
SCAK10-015C-SCAK10-560C-Y	Bidirectional	AK	-	15-560	10	28-790	10000	16-585	19-650
SCAK15-030C-SCAK15-380C-Y	Bidirectional	AK	-	30-380	10	90-520	15000	32-401	37-443
SCAK1-076CN-SCAK1-430CN	Bidirectional	AK	-	76-430	10	140-625	1000	85-440	95-490
SCAK3-015CN-SCAK3-560CN	Bidirectional	AK	-	15-560	10	28-720	3000	16-585	19-650
SCAK6-015CN-SCAK6-560CN	Bidirectional	AK	-	15-560	10	28-720	6000	16-585	19-650
SCAK10-015CN-SCAK10-560CN	Bidirectional	AK	-	15-560	10	28-720	10000	16-585	19-650
SCAK15-030CN-SCAK15-380CN	Bidirectional	AK	-	30-380	10	90-520	15000	32-401	37-443
SCAK1-076CN-SCAK1-430CN-Y	Bidirectional	AK	-	76-430	10	140-625	1000	85-440	95-490
SCAK3-015CN-SCAK3-560CN-Y	Bidirectional	AK	-	15-560	10	28-720	3000	16-585	19-650
SCAK6-015CN-SCAK6-560CN-Y	Bidirectional	AK	-	15-560	10	28-720	6000	16-585	19-650
SCAK10-015CN-SCAK10-560CN-Y	Bidirectional	AK	-	15-560	10	28-720	10000	16-585	19-650
SCAK15-030CN-SCAK15-380CN-Y	Bidirectional	AK	-	30-380	10	90-520	15000	32-401	37-443
SMAK3-058C-SMAK3-190C	Bidirectional	SMTO-218	-	58-190	10	110-290	3000	64-200	70-245
SMAK6-058C-SMAK6-076C	Bidirectional	SMTO-218	-	58-76	10	110-140	6000	64-85	70-95
SMAK10-030C-SMAK10-086C	Bidirectional	SMTO-218	-	30-86	10	58-157	10000	32-95	37-105

Note: Some of latest new products and Patent products can be not included in this catalog, please contact Semicon Champion technical center directly for special protection requirement.

Low clamping capability TVS nCLAMP™

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
3.0SMDJ58CA-n	Bidirectional	SMC	3000	58	2	80	540	64.4	71.2
3.0SMDJ64CA-n	Bidirectional	SMC	3000	64	2	88	480	71.1	78.6
3.0SMDJ70CA-n	Bidirectional	SMC	3000	70	2	96	450	77.8	86.0
3.0SMDJ78CA-n	Bidirectional	SMC	3000	78	2	107	400	86.7	95.8
5.0SMDJ58CA-n	Bidirectional	SMC	5000	58	2	80	1000	64.4	71.2
5.0SMDJ64CA-n	Bidirectional	SMC	5000	64	2	88	910	71.1	78.6
5.0SMDJ70CA-n	Bidirectional	SMC	5000	70	2	96	830	77.8	86.0
5.0SMDJ78CA-n	Bidirectional	SMC	5000	78	2	107	740	86.7	95.8
3.0SMD75A-VBR-Un	Unidirectional	SMC	3000	64.1	2	90	350	71.3	78.8
3.0SMD82A-VBR-Un	Unidirectional	SMC	3000	70.1	2	100	314	77.9	86.1
3.0SMD91A-VBR-Un	Unidirectional	SMC	3000	77.8	2	110	286	86.5	95.5
3.0SMD93A-VBR-Un	Unidirectional	SMC	3000	79.5	2	112	281	89.3	96.7

Low clamping capability TVS hCLAMP™

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
SMF40CA-h	Bidirectional	SOD123-FL	200	40	1	54(8-20μs)	200	44.4	49.1
SMBJ15CA-h	Bidirectional	SMB	600	15	1	22(8-20μs)	500	16.7	20
SMBJ20CA-h	Bidirectional	SMB	600	20	1	30(8-20μs)	500	21.2	24.5
SMBJ30CA-h	Bidirectional	SMB	600	30	1	44(8-20μs)	500	33.4	40
SMBJ58CA-h	Bidirectional	SMB	600	58	1	85(8-20μs)	500	62.4	71.2
SMDJ33CA-h	Bidirectional	SMC	3000	33	1	70(8-20μs)	2000	36.7	40.6

Asymmetric TVS

Part Number	Polarity	Package	PeakPluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage	
			P_{PPM}(W)	V_{RWM}(V)	I_R(μA)	V_C(V)	I_{PP}(A)	V_{BR}(V)Min	V_{BR}(V)Max
SMF1505CA-SMF2005CA	Bidirectiona	SOD-123FL	200	5.5	400	10.5	2	6.82	7.48
				15-20	1	24.05-31.85	2	16.7-22.2	18.5-24.5
SMAF1505CA-SMAF2005CA	Bidirectiona	SMAF	400	5.5	400	10.5	2	6.82	7.48
				15-20	1	24.05-31.85	2	16.7-22.2	18.5-24.5
SMBJ1505CA-SMBJ2205CA	Bidirectional	SMB	600	5-8	50-500	11.5-13.6	44.2-60	6.8-8.7	7.4-9.9
				15-22	1	26.8-39	16.9-24.6	16.7-24.4	18.5-26.9
TPSMBJ1505CA-VR-TPSMBJ2205CA-VR	Bidirectional	SMB	600	5-8	50-500	9.2-35.5	44.2-60	6.8-8.7	7.4-9.9
				15-22		24.4-35.5	16.9-24.6	16.7-24.4	18.5-26.9

TSS Devices

Part Number	Package	V_{DRM}(V)	V_S(V)	I_H Min(mA)	I_S Max(mA)	I_T(A)	V_T(V)	C_O(pF)	V_{PP}(V)	I_{PP}(A)
PXXXXNILRP	MINI-218	155-320	220-400	50	800	2.2	4	600-780		5000
PXXXXS1A	SMA	6-25	25-40	25-30	800	2.2	4	35-50	3000	
PXXXXS1B	SMA	6-25	25-40	20-50	800	2.2	4	35		100
P0080SBLRP-LVs	SMB	6	13	50	800	2.2	4	35	4000	
PxxxxSBLRP	SMB	6-340	25-450	50-120	800	2.2	4	25-40	4000	
PxxxxSCLRP	SMB	6-440	25-580	30-120	800	2.2	4	45-80	6000	
PXXXXSDLRP	SMB	170-320	220-400	5	800	2.2	4	45-90		300
PxxxxSDLRP-LIH	SMB	140-340	180-450	50	800	2.2	4	100-150	8000	
PXXXXS3FLRP-LIH	SMC	170-380	220-500	50	800	2.2	4	150		2000
PXXXXS2XLRP	SOD-123FL	6-25	25-40	25-50	400-800	2.2	4	5-40		150-220
PXXXXEBLRP	TO-92	6-190	25-260	50-150	800	2.2	4	25		75-200
PLEDXXS4ALRP	SMAF	3.7-25	12-40	20	800	2.2	4	30-100	3000	
PLEDXXSALRP	SMB	6-25	15-40	20-50	800	2.2	4	30-100	3000	
PLED6S2MLRP	SOD-123FL	6	15	12	800	2.2	4	40		2000
SCXXXXS3NLRP	SMC	6-380	25-500	50	800	2.2	4	150		3000

SCR Devices

Part Number	Package	V_{DRM}(V)	$I_{T(RMS)}$ (A)	IGT1(mA)	V_{GT}(V)	I_H(mA)	I_L (mA)	V_{TM}(V)	I_{TSM}(A)	T_j(°C)
BT131	TO-250	800	8	15	1.3	40	50	1.7	60	125
BT134	TO-92	800	1	7	1.5	5	5	1.5	12.5	125
BTA12/BTB12	TO-220	800	12	5-50	1.5	10-50	10-50	1.7	120	125
BTA16/BTB16	TO-220	800	16	10-50	1.3	10-50	30-80	1.5	160	125
BTA25	TO-263	1200	25	50	1.3	50	80	1.5	250	125
BTA41	TO-243	1200	40	50	1.3	80	90	1.5	400	125
TYN808	TO-250	800	8	15	1.3	40	50	1.7	60	125

STD Devices

Part Number	Package	V_{RRM}(V)	V_{RMS}(V)	V_{DC}(V)	I(AV)(A)	I_{FSM} (A)	V_F (V)	I_R(μA)	C_J (PF)	Rθja(°C/W)
GS2X	SMA	50-1000	35-700	50-1000	2	60	1.1	5	30	50
S2X	SMB	50-1000	35-700	50-1000	2	50	1.1	5	30	35
S1JS-FAST	SMF	600	420	600	1	25	1	1	6	75
S1X	SMA	50-1000	35-700	50-1000	2	30	1.1	5	15	75
S2X	SMB	50-1000	35-700	50-1000	2	50	1.1	5	30	35
SES1X	SMA	50-1000	35-700	50-1000	1	30	1.25	5	15	60
S3XC	DO-218AB	50-1000	35-700	50-1000	3	100	1.1	5	60	25
SES5X	SMC	50-600	35-420	50-600	5	150	0.95-1.7	5	58	47
DBXXXX	DBX	50-1000	35-700	50-1000	1	35	1.1	50	20	70
HBSXXX	HBS	200-1000	140-700	200-1000	6	170	0.96	20	50	75
KBPXXX	KBP	50-1000	35-700	50-1000	2	60	1.1	10	25	30

SIDAC Device

Part Number	Package	V_{DRM}(V)	V_{BO}(V)		I_H(mA)	I_{DRM}(μA)	I_{BO}(μA)	V_T(T)	R_S(Ω)
			Min	Max					
TTXXXT5ARP	DO-15	120-210	142	250	10-80	5	10	1.2	100
TTXXXT5CRP	DO-15	120-210	142	250	10	1	50	2	100
TTXXXS1ARP	SMA	120-210	142	250	10-80	5	10	1.2	100
TTXXXS1CRP	SMA	120-210	142	250	10	1	50	2	100
TTXXXS1ARP-M	SMA	120-190	145	230	10-80	5	10	1.2	100
TTXXXT4ARP	DO-41	120-210	142	250	10-80	5	10	1.2	100
TTXXXT4CRP	DO-41	120-210	142	250	10	1	50	2	100

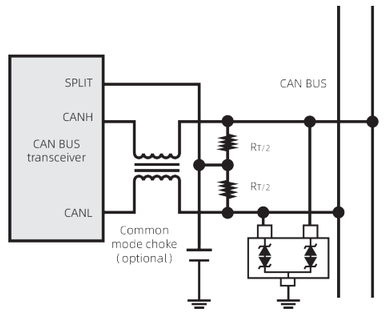
Zener Devices

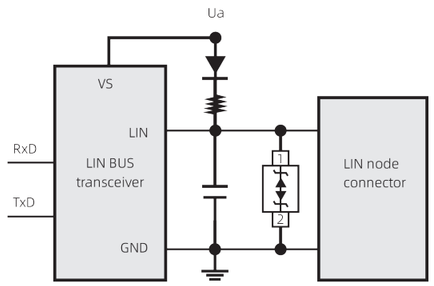
Part Number	Package	P_D	V_Z(V)	I_{ZT}(mA)	Z_{ZT}(Ω)	Z_{ZK}(Ω)	I_{ZK}(mA)	I_R(μA)	V_R(V)	T_J(°C)
SZX884C Series	DFN1006	0.25	2.4-75	2-5	10-255	80-600	0.5-1	0.05-50	1-52.5	150
SZX884C-350 Series	DFN1006	0.35	2.4-75	2-5	10-255	80-650	0.5-1	0.05-50	1-52.5	150
ZLEDC47FW-C	DFN1006	0.25	47	2	600	400	0.5	0.1	30	150
ZLEDCXXFW Series	DFN1006	0.35	9.1-75	2	15-255	100-500	0.5-1	0.05-0.5	6-52.5	125
1SMA47XX Series	SMA	1	3.3-200	1.2-75	2-1400			1-100	1-150	150
1SMB59XXB Series	SMB	3	3.3-200	1.9-113.6	2-1200	200-8000	0.25-1	1-100	1-152	150
SMB53xxB Series	SMB	5	6.2-200	5-200	1-480	75-1850	1	0.5-100	3-152	150
SZT52B Series	SOD123	0.35	2.4-43	2-5	15-100	80-750	0.5-1	0.1-50	1-32	150
SZT52B-LF Series	SOD123	0.35	2.4-51	5	7-100	50-750	1	0.1-100	0.8-38	150
SZT52CXX-LF Series	SOD123	0.5	2.4-75	2-5	10-255	80-1000	0.5-1	0.01-50	1-52.5	150
SZT52CX Series	SOD123-FL	1	3.3-220	2-110	2-440	80-3200	0.25-1	1-80	1-167	150
SZ82CU	SOD323	0.3	82	1	255	2000	0.25	2	62.2	125
SZT52B Series	SOD323	0.2	2.4-75	2-5	10-265	80-1700	0.25-1	0.1-50	1-56	150
SZT52CXXS-LF Series	SOD323	0.3	2.4-75	2-5	10-265	80-1700	0.25-1	0.05-50	1-56	150
SZX584C2V4-SZX584C43	SOD523	0.15	2.4-43	2-5	10-130	80-700	0.5-1	0.1-50	1-32	150
SZX584B Series	SOD523F	0.15	2.4-75	2-5	10-265	80-1700	0.25-1	0.1-50	1-56	150
MMBZ52XXB Series	SOT23	0.3	2.4-43	3-20	5-93	500-1200	0.25	0.1-100	1-33	150
SZ59XXS1-T3 Series	SMA	1	3.3-200	1.9-113.6	10-1200	500-8000	0.25-1	0.5-100	1-152	150
SZXXS1UA-LF Series	SMA	1.25	3.3-100	2.7-80	3.5-350	400-3000	0.25-1	0.5-40	1-75	150
1SMA47XX-AT Series	SMA	1	3.3-200	1.2-75	2-1400			1-100	1-150	150
1SMAF47XX-AT Series	SMAF	1	3-100	2.5-80	2-350	400-3000	0.25-1	0.5-100	1-76	150
1SMB59XXB-AT Series	SMB	3	3.3-200	1.9-113.6	2-1200	200-8000	0.25-1	1-100	1-152	150
SZT52B-AT Series	SOD123	0.35	2.4-47	2-5	15-170	80-1000	0.25-1	0.1-50	1-36	150
SZXXS2UA Series	SOD123	0.5	5.89-104.5	1.1-20	5-750	500-3000	0.25	0.1-5	4-84	150
SZT52BX-AT Series	SOD123-FL	1	3.3-75	2-110	2-265	80-1700	0.25-1	1-50	1-56	150
SZT52CX-AT Series	SOD123-FL	1	3.3-82	0.5-110	2-250	80-1500	0.25-1	1-80	1-57.4	150
SZT52BxxS-AT Series	SOD323	0.3	2.4-75	2-5	10-265	80-1700	0.25-1	0.1-50	1-56	150
SZT52CXXS-AT Series	SOD323	0.3	2.4-75	2-5	10-265	80-1700	0.25-1	0.05-50	1-56	150
SZT52CXX4SF-AT Series	SOD323F	0.5	3.3-75	2-5	10-265	80-1700	0.25-1	0.1-5	1-56	150
SZX84C-AT Series	SOT23	0.35	2.28-71.25	2-5	10-255	0.5-600	1-1700	0.05-50	1-52.5	150

Schottky Barrier Diode

Part Number	Package	V_R(V)	V_F (V)	I(mA)	I_{FSM}(mA)	I_R(μA)
SB521ZSX-30	DFN0603	30	0.35	100	500	10
SB520FX-30	DFN1006	30	0.37	200	500	0.5
SB521BS-40	DFN1006	40	0.35-0.6	200	500	2-10
SS12 THRU SS120	SMA	20-200	0.55-0.95	1	30	0.5-10
SS52A THRU SS520A	SMA	20-200	0.55-0.95	5	150	0.5-20
SCS32F THRU SCS320F	SMAF	20-200	0.55-0.95	3	70-80	0.5-5
SCS52F THRU SCS520F	SMAF	20-200	0.55-0.95	5	120-140	0.3-40
SS22AF THRU SS220AF	SMAF	20-200	0.55-0.95	2	40-50	0.3-5
SL24 THRU SL220	SMB	40-200	0.46-0.85	2	60	0.05-5
SS32B THRU SS320B	SMB	20-200	0.55-0.95	3	100	0.2-20
SS52B THRU SS520B	SMB	20-200	0.55-0.85	5	150	0.3-50
SS32 THRU SS320	SMC	20-200	0.55-0.95	3	100	0.5-5
SS52 THRU SS520	SMC	20-200	0.55-0.95	5	150	0.5-20
S32F THRU S320F	SOD-123FL	20-200	0.55-0.92	3	80	5-100
SB5817W THRU SB5819W	SOD-123FL	20-40	0.45-0.9	1	9000	1
SS22F THRU SS220F	SOD-123FL	20-200	0.55-0.95	2	40-50	0.3-5
B58XXWX Series	SOD-323	20-40	0.45-0.9	1000	10000	1-10
BAT46WS	SOD-323	100	0.25-1	150	750	0.3-1
SCSR1X	SOD-323	50-1000	0.95-1.15	1000	10000	5
SD103AWS THRU SD103CWS	SOD-323	20-40	0.37-0.6	350	2000	5
SB520CX-40	SOD-323	40	0.3-0.6	200	500	2-10
BAS40M3	SOD-323F	40	0.38-1	200	600	10-200
RB521SM5-30	SOD-523	30	0.35-0.5	200	1000	30-100
RB751M5-40	SOD-523	30	0.37	30	0.2	0.5
SRB521S-40	SOD-523	40	0.37-0.6	200	1000	30
SD103AX	SOD-523F	40	0.37-0.6	350	2000	5
RB521SM9-30	SDO-923	30	0.35-0.5	200	1000	30-100
BAT54	SOT-23	30	0.24-1	200	600	2
BAT54W	SOT-323	30	0.24-1	200	600	2
BAT54XT	SOT-523	21	0.32-1	200	600	2
MBR20L200CT-D	TO-220AB	200	800-900	20000	200000	0.1-10
MBR20100CT THRU MBR20200CT	TO-220AB	100-200	0.85-0.95	20000	150000	0.1-20
MBRXXXYS Series	TO-252	28-140	0.55-0.95	5000	120000	0.05-10
ST2070N	TO-263	50	0.35-0.4	20000	300000	0.05-12
ST2080D	TO-263M	50	0.42-0.45	20000	300000	0.05-12
ST2080S	TO-277B	50	0.38-0.45	20000	300000	0.05-12
SS22-AT THRU SS220-AT	SMA	20-200	0.55-0.95	2	50	0.5-10
SB5817W-AT THRU SB5819W-AT	SOD-123FL	20-40	0.45-0.9	1	9000	1

ESD Protection Devices Typical Application

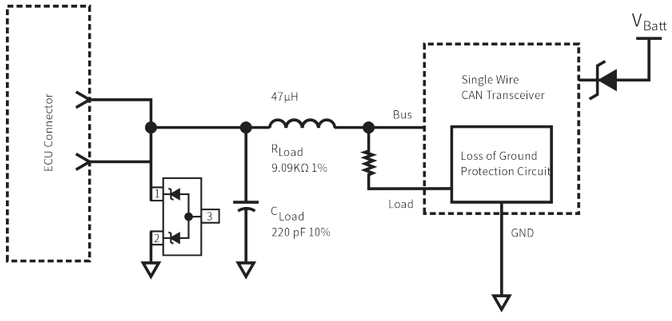




CAN bus protection

LIN bus protection

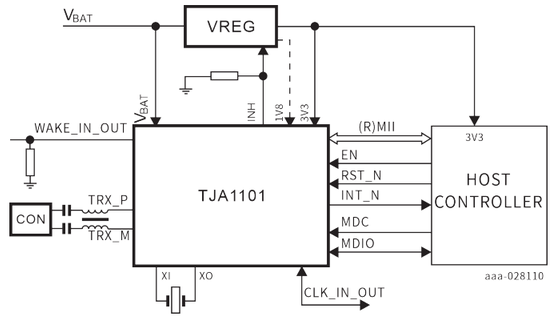
P/N	Vr(V)	8/20μs Ipp max(A)	Capacitance max(pF)
ASH24E2BA	24	9	30
ASL24E2B	24	4	0.8
ASH24CB	24	7	30
ASH1524CB	15/24	5	17
P0330T023G6RP-A	33	35	2



ECU Protection

P/N	Vr(V)	8/20μs Ipp max(A)	Capacitance max(pF)
ASH24E2U	24	7	60

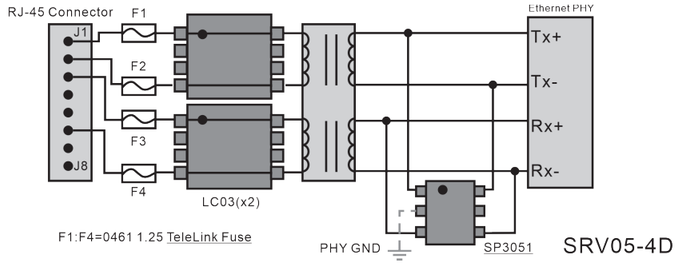
ESD Protection Devices Typical Application



Te TJA1101 is a 100BASE-T1 compllant Ethemet PHY optimized for automotive use cases such as gateways,IP camera links, driver assistance systems and backbone networks. The device provides 100 Mbit/s transmit and receive capability over two unshielded twisted-pair cables, supporting a cable length of up to at least 15 m.The TJA1101 has been designed for automotive robustness and ISO 26262, ASIL-A compliance.

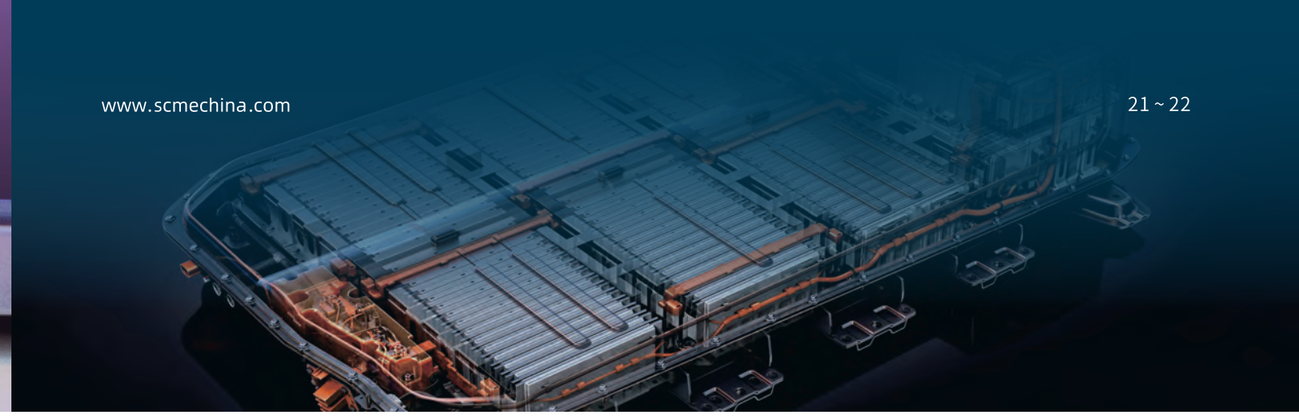
Car 100M Ethernet protection

Application	Part Number	Series	Ppk(W)	V_R(V)(max.)	I_{PP}(A)(max.)	C_J(pF)(max.)
Capacitor side	ASL05H2U6	DFN1610-6L	60	5	4	0.3
	ASL05FU	DNF1006	80	5	4	0.4
Connector side	ASL24E2B	SOT23-3	300	24	4	0.8
Connector side	ASMS24D2B	SOT-23-6L	500	33	35	2.0

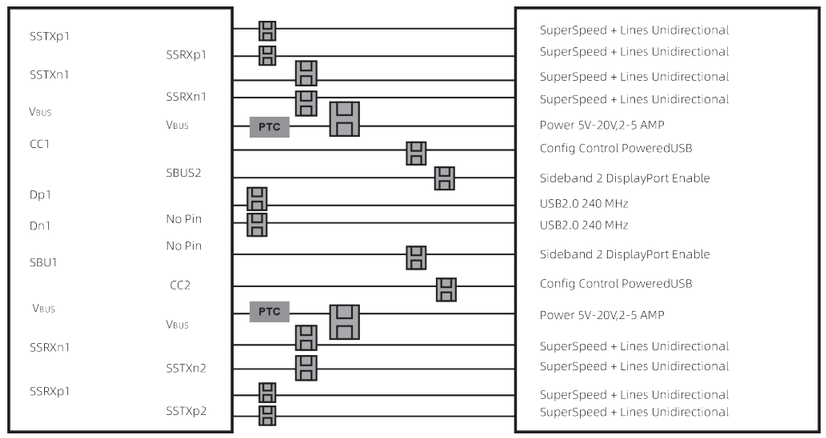


1000M/10G Ethernet protection

P/N	Package	Vr(V)	8/20μs Ipp max(A)	Capacitance max(pF)
LC03-3.3	SO-8	3.3	100	7.5
SRV05-4D	SOT23-6	24	25	1.8



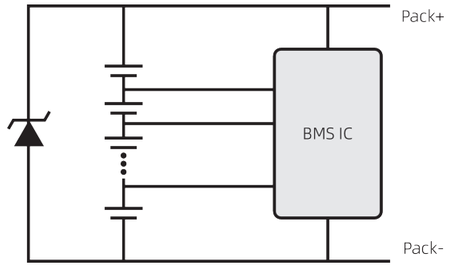
ESD Protection Devices Typical Application



USB3.1 Port protection

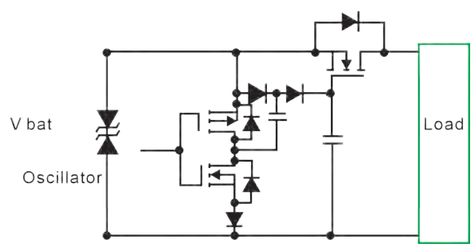
Location	P/N	Vr (V)	8/20μs Ipp max(A)	Capacitance max (pF)
Power	CSH12HUB	12	60	360
	CSH15HUB	15	50	320
	CSH18HUB	18	40	260
	CSH22HUB	22	30	230
	CSH24HUB	24	25	200
	CSH12W2U3	12	200	1300
	CSH15W2U3	15	170	1200
	CSH18W2U3	18	150	1200
	CSH24W2U3	24	120	1000
USB2.0	CSL05FBB	5	4	0.3
	CSL05LBB	5	4	0.3
CC1/CC2 SBU1/SUB2	CSH05FBJ	5	8	20
	CSH05LBS	5	7	18
SS signal	CSES05LWB	5	7	0.2
	CSES03LWB	3	7	0.25

TVS Protection Devices Typical Application



BMS low clamp protection

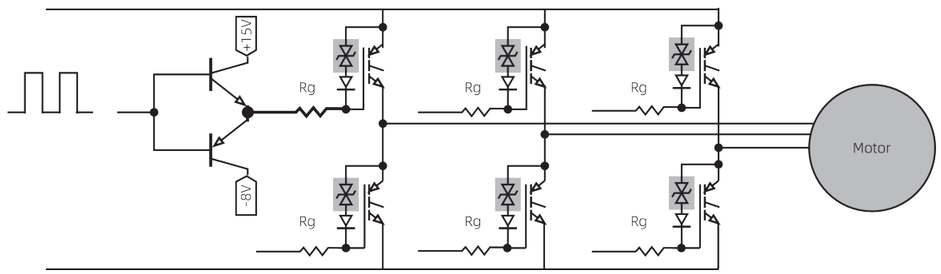
Battery	14 Series	16 series	Part Number	Clamp	10/1000μs Vc	8/20μs @400V
LFP	3.7V	3.2V	3.0SMD75A-Un	U-nCLAMP	<85V	<90V
			SMDJ64A	Traditional	<103V	<133V
Lithium-ion		4.3V	3.0SMD91A-Un	U-nCLAMP	<100V	<110V
			SMDJ78A	Traditional	<125V	<162V
LFP	3.7V	3.2V	TPSMD75A-VBR-Un	U-nCLAMP	<85V	<90V
			TPSMD64A	Traditional	<103V	<133V
Lithium-ion		4.3V	TPSMD91A-VBR-Un	U-nCLAMP	<100V	<110V
			TPSMD78A	Traditional	<125V	<162V



Anti-Reverse protection

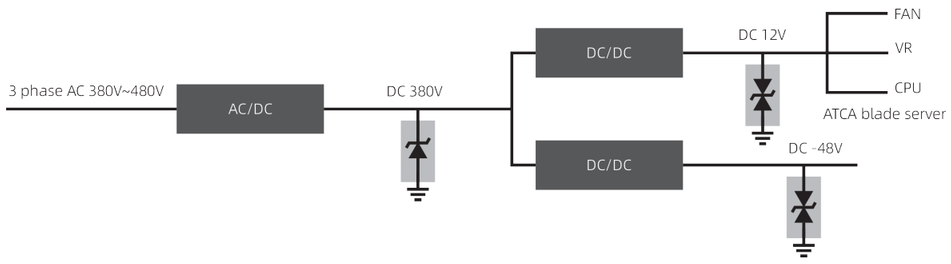
P/N	Vr1(V)	Vr2(V)	Power(10/1000μs)
SMA6J2814CA-H	28	14	600W

TVS Protection Devices Typical Application



IGBT active clamp protection

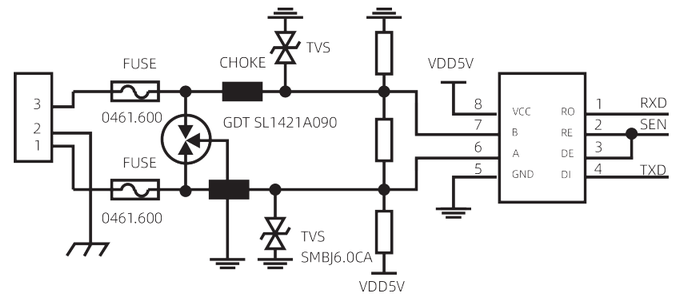
Vge (driver)	Vcg(active clamp)	IGBT Vce	Quantity
SMBJ18CA	1pcs TPSMB200CA +2pcs TPSMB200A	750V	18pcs
	SMBJ600CA-H	750V	6pcs



Server power circuit protection

Location	Surge	Product Suggested
DC 380V	2kV	SMAK1-430A / SMAK1-430CA
DC 12V	1kV	5.0SMDJ13CA
DC-48V	6kV	SMAK3-076C
	2kV	30KPA78CA

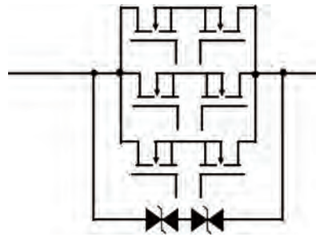
TVS Protection Devices Typical Application



RS-485 port protection

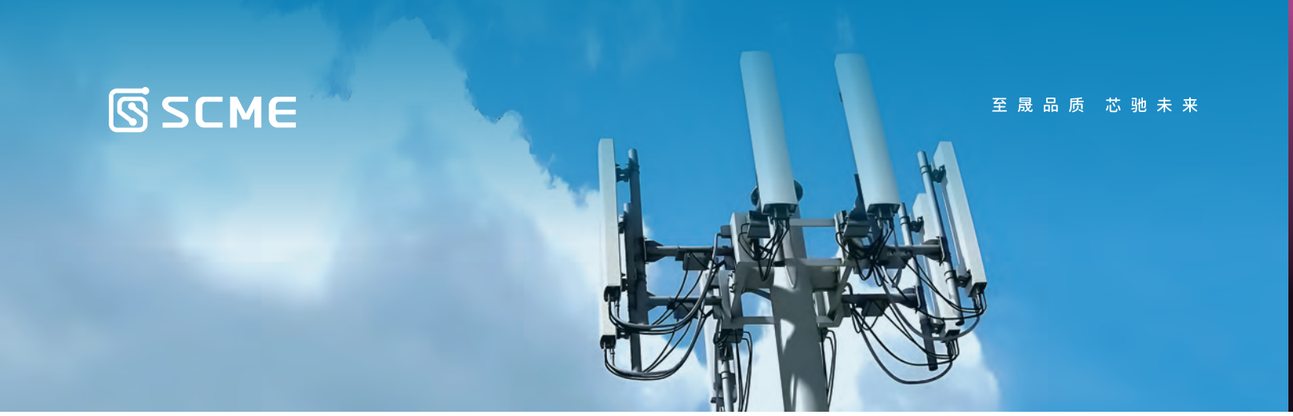
(GDT&TVS can be replaced by P0800SALRP for middle level surge)

Terminal	Part Number	Protection Level
RS-485	P0300S1BLRP	4kV10/700μs YD/T 993-1998
	SMF4L24CA	1.5kV 10/700μs YD/T 993-1998
	CSH24E2BA	9A 8/20μs

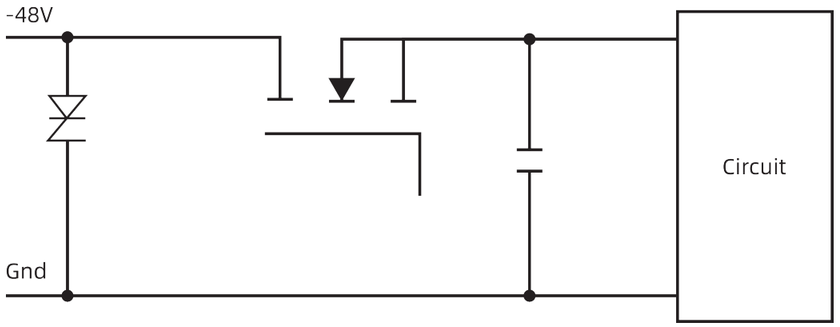


Solid-State Circuit Breaker protection

P/N	Vr(V)	8/20μs Ipp(A)	1200V SiC MOS/IGBT
SCAK3-380C	380	3	2TVS Series Connect
SCAK6-430C	430	6	2TVS Series Connect
SCAK10-430C	430	10	2TVS Series Connect



TVS Protection Devices Typical Application

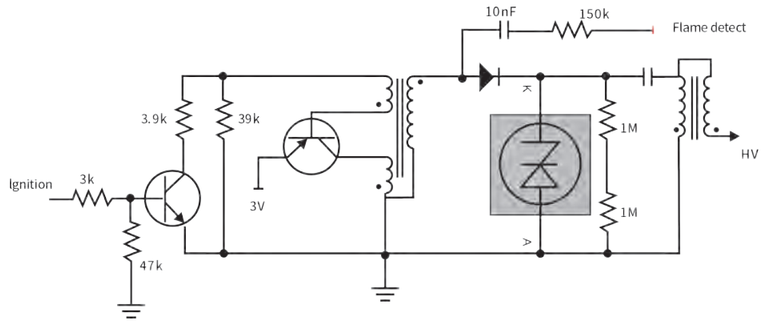


Base station -48V DC power protection

P/N	TVS Vr(V)	TSS Vdrm(V)	8/20μs Ipp(kA)
DFNTT10-7685C	76	85	10

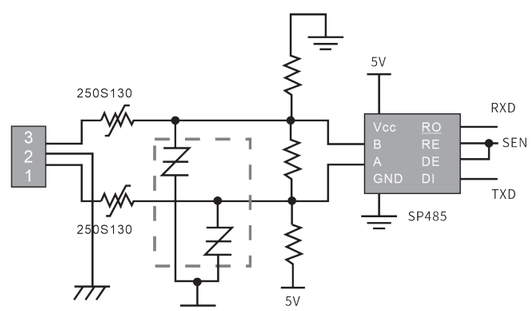
Note：Not released .

TSS&SIDAC Devices Typical Application



Ignitor

P/N	Vdrm(V)	VBO(V)	IH(mA)
TT150S1ARP	120	142~157	10~80
TT220T5ARP	190	210~230	10~80



P0080SBLRP/P0080S1BLRP for 4kV 10/700μS

RS-485 protection

P/N	Package	Vdrm(V)	VS(V)	10/700μs(V)
P0080SBLRP	DO-214AA	6	13	4000
P0080S1BLRP	DO-214AC	6	13	4000