

Working Voltage: 15V to 85 V

Peak Pulse Power: 6600 W

Features

- Glass passivated junction
- 6.6KW peak pulse power capability on 10/1000 μ s waveform
- RoHS compliant
- AEC-Q101 qualified
- Very low clamping voltage
- High temperature soldering: 260°C/10 seconds at terminals
- Continued current transient suppressor

IEC Compatibility

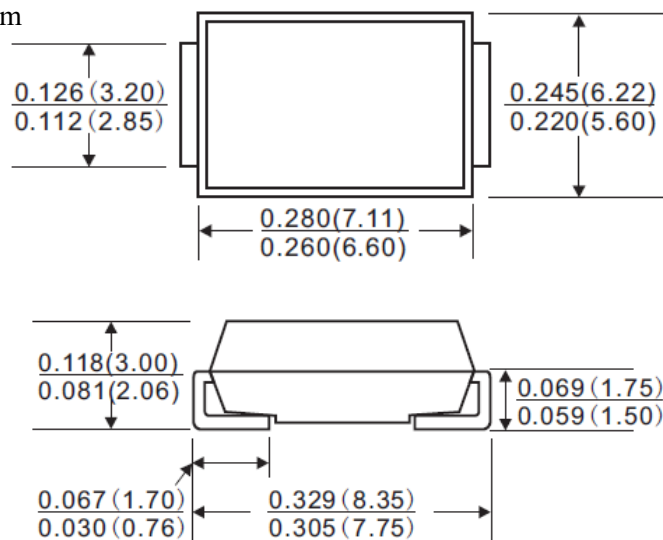
- ISO 16750-2 Test A 12v System (87V 2 Ω 150ms 10c)

Applications

- Auto powers
- System Can-bus
- ABS powers
- Car audio and video
- Automotive instrument
- Bluetooth
- Car GPS

Surface Mount Auto Surge Suppressor

DO-214AB/(SMC)

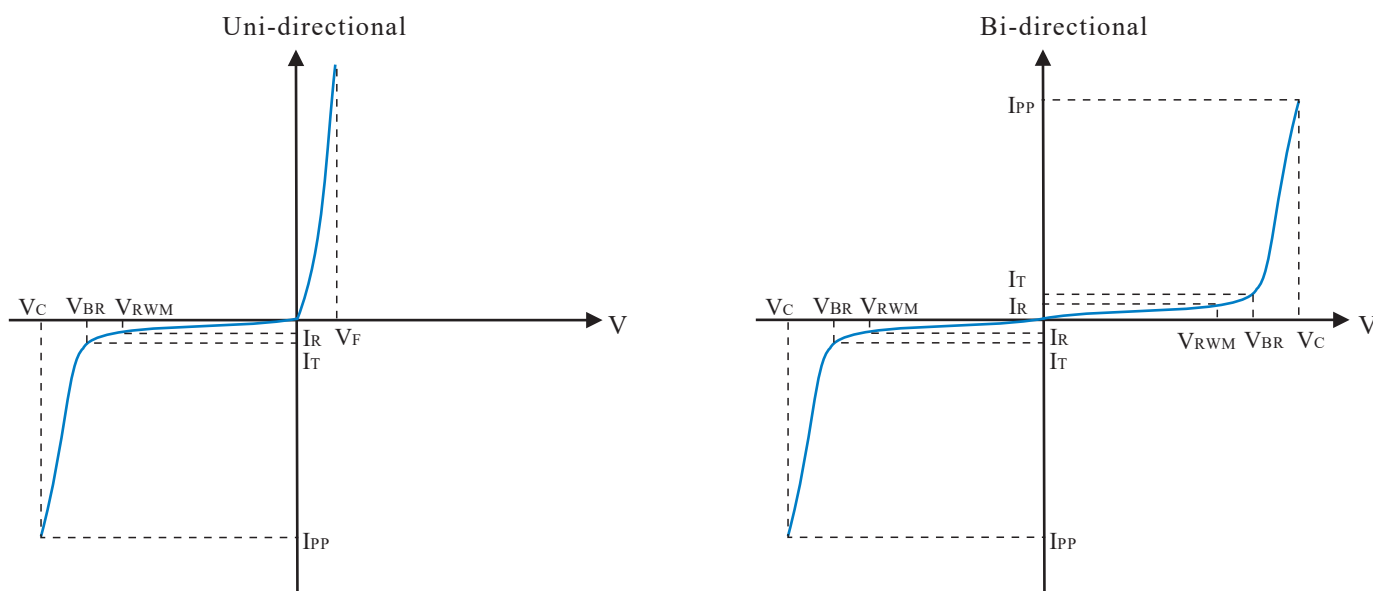


Unit: inch (mm)

Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 μ s waveform	P_{PP}	6600	W
Peak pulse current with a 10/1000 μ s waveform ⁽¹⁾	I_{PP}	See Next Table	A
Operating junction and storage temperature range	T_J , T_{STG}	-55 to +150	$^\circ\text{C}$

I-V Curve Characteristics





Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Peak Pulse Power Rating Cure

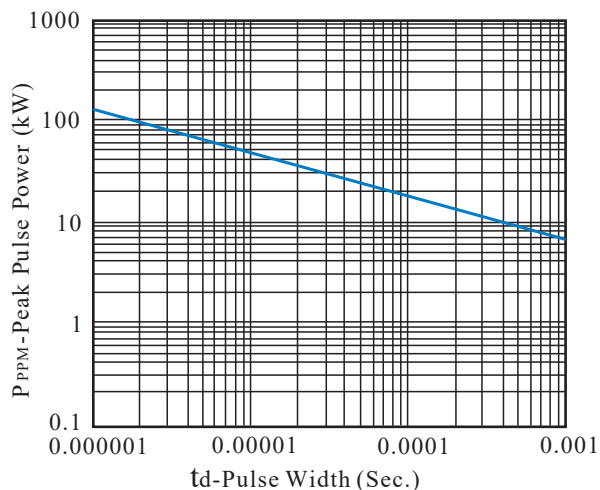


Fig.2 Typical Junction Capacitance

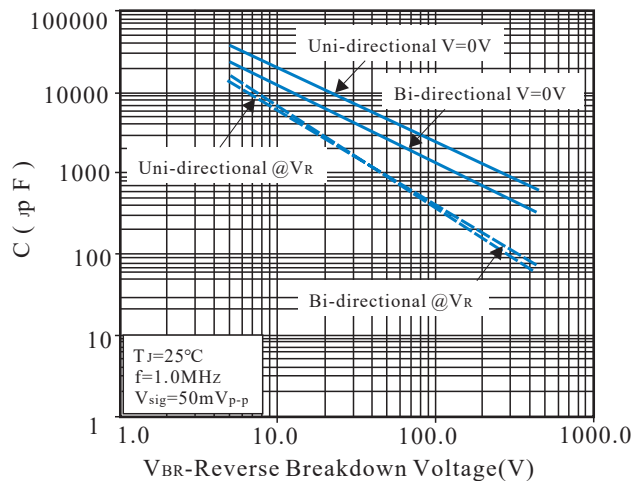


Fig.3 Pulse Waveform

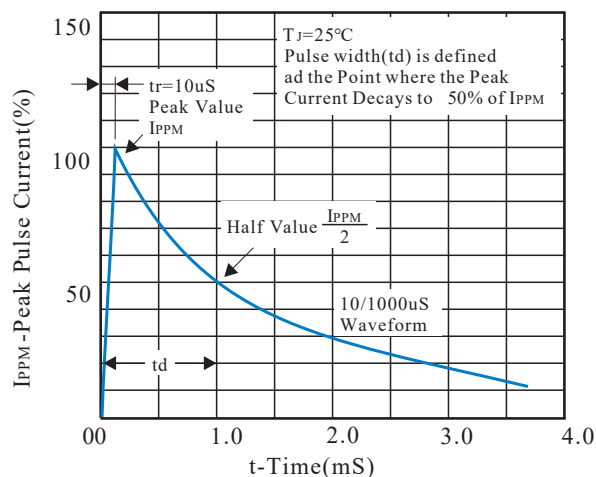


Fig.4 Maximum Non-repetitive Forward Surge

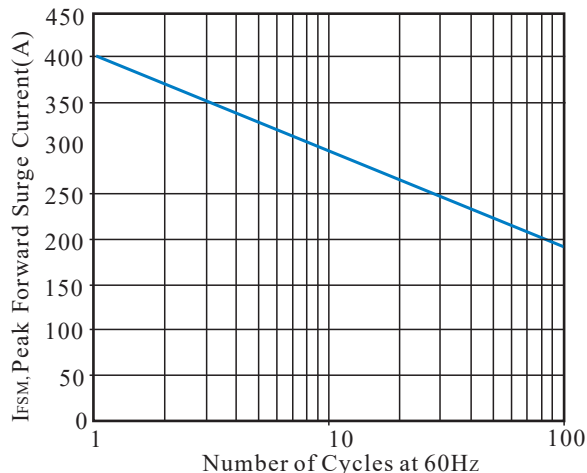


Fig.5 Ri-Vs chart for ISO-16750-2 Test A : 12V System

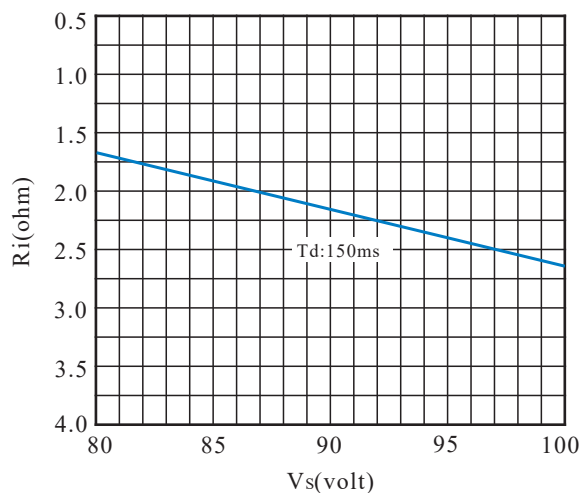
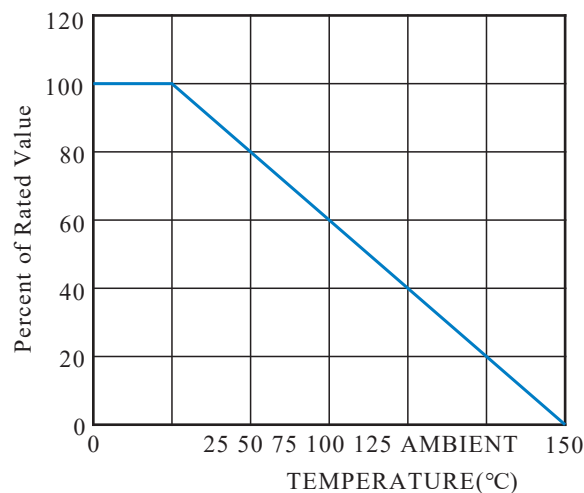
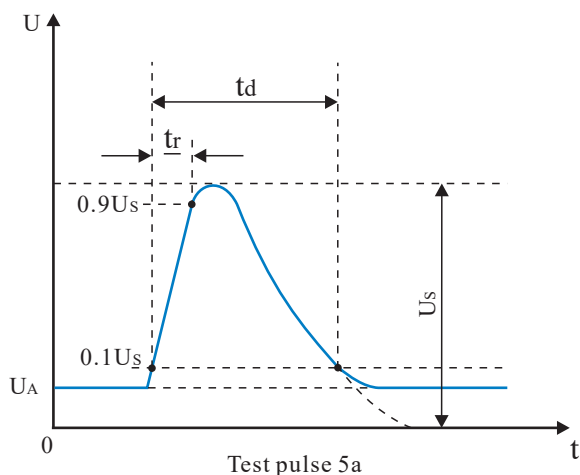


Fig.6 Power Derating Cure



Test ISO 16750-2 Test A



Parameter	12V System	24V System
U_s	79V to 101V	151V to 202V
R_i	0.5Ω to 4Ω	1Ω to 8Ω
t_d	40ms to 400ms	100ms to 350ms
t_r	$(10 \begin{smallmatrix} 0 \\ -5 \end{smallmatrix})$ ms	

Electrical Characteristics

Part Number		Device Marking Code		Stand-Off Voltage	Reverse Leakage @ V_{RWM}	Breakdown Voltage $V_{BR}@I_T$		Test Current	Max. Clamping Voltage @ I_{PP} 10/1000μs	
Uni-Polar	Bi-Polar	Uni	Bi	$V_{RWM}(V)$	$I_R (\mu A)$	Min (V)	Max (V)	$I_T(mA)$	$V_C(V)$	$I_{PP}(A)$
TP6.6SMDJ15A	TP6.6SMDJ15CA	6PEKA	6BEKA	15	100	16.7	18.5	1	24.4	270.4
TP6.6SMDJ16A	TP6.6SMDJ16CA	6PEMA	6BEMA	16	50	17.8	19.7	1	26.0	253.8
TP6.6SMDJ17A	TP6.6SMDJ17CA	6PEPA	6BEPA	17	50	18.9	20.9	1	27.6	239.1
TP6.6SMDJ18A	TP6.6SMDJ18CA	6PERA	6BERA	18	50	20.0	22.1	1	29.2	226.0
TP6.6SMDJ20A	TP6.6SMDJ20CA	6PEVA	6BEVA	20	10	22.2	24.5	1	32.4	203.7
TP6.6SMDJ22A	TP6.6SMDJ22CA	6PEXA	6BEXA	22	2	24.4	26.9	1	35.5	185.9
TP6.6SMDJ24A	TP6.6SMDJ24CA	6PEZA	6BEZA	24	2	26.7	29.5	1	38.9	169.7
TP6.6SMDJ26A	TP6.6SMDJ26CA	6PFEA	6BFEA	26	2	28.9	31.9	1	42.1	156.8
TP6.6SMDJ28A	TP6.6SMDJ28CA	6PFGA	6BFGA	28	2	31.1	34.4	1	45.4	145.4
TP6.6SMDJ30A	TP6.6SMDJ30CA	6PFKA	6BFKA	30	2	33.3	36.8	1	48.4	136.4
TP6.6SMDJ33A	TP6.6SMDJ33CA	6PFMA	6BFMA	33	2	36.7	40.6	1	53.3	123.8
TP6.6SMDJ36A	TP6.6SMDJ36CA	6PFPA	6BFPA	36	2	40.0	44.2	1	58.1	113.6
TP6.6SMDJ40A	TP6.6SMDJ40CA	6PFRA	6BFRA	40	2	44.4	49.1	1	64.5	102.3
TP6.6SMDJ43A	TP6.6SMDJ43CA	6PFTA	6BFTA	43	2	47.8	52.8	1	69.4	95.1
TP6.6SMDJ45A	TP6.6SMDJ45CA	6PFVA	6BFVA	45	2	50.0	55.3	1	72.7	90.8
TP6.6SMDJ48A	TP6.6SMDJ48CA	6PFXA	6BFXA	48	2	53.3	58.9	1	77.4	85.3
TP6.6SMDJ51A	TP6.6SMDJ51CA	6PFZA	6BFZA	51	2	56.7	62.7	1	82.4	80.1
TP6.6SMDJ54A	TP6.6SMDJ54CA	6PGEA	6BGEA	54	2	60.0	66.3	1	87.1	75.8
TP6.6SMDJ58A	TP6.6SMDJ58CA	6PGGA	6BGGA	58	2	64.4	71.2	1	93.6	70.5
TP6.6SMDJ60A	TP6.6SMDJ60CA	6PGKA	6BGKA	60	2	66.7	73.7	1	96.8	68.2
TP6.6SMDJ64A	TP6.6SMDJ64CA	6PGMA	6BGMA	64	2	71.1	78.6	1	103.0	64.1
TP6.6SMDJ70A	TP6.6SMDJ70CA	6PGPA	6BGPA	70	2	77.8	86.0	1	113.0	58.4
TP6.6SMDJ75A	TP6.6SMDJ75CA	6PGRA	6BGRA	75	2	83.3	92.1	1	121.0	54.5
TP6.6SMDJ78A	TP6.6SMDJ78CA	6PGTA	6BGTA	78	2	86.7	95.8	1	126.0	52.3
TP6.6SMDJ80A	TP6.6SMDJ80CA	6PGBA	6BGBA	80	2	88.8	97.6	1	129.6	51.1
TP6.6SMDJ85A	TP6.6SMDJ85CA	6PGVA	6BGVA	85	2	94.4	104.0	1	137.0	48.2

Notes :

For bidirectional type having V_{RWM} of 18 volts and less, the I_R limit is double.