

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet



SMA



Symbol

### Features

- Low capacitance
- Cannot be damaged by voltage
- Will not fatigue
- Eliminate voltage overshoot
- Glass passivated junction
- Halogen free and RoHS compliant

### Mechanical Data

- CASE: SMAJ(DO-214AC) Molded Plastic
- UL Flammability Classification Rating 94V0
- Mounting Position:Any

### Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Units	Remarks
Peak Pulse Voltage	$V_{PP}$	4000	V	10/700us
Peak Pulse Current	$I_{PP}$	80	A	10/1000us
Peak Pulse Current	$I_{PK}$	250	A	8/20us
Peak One-cycle Surge Current	$I_{TSM}$	25	A	60Hz
Rate of Rise of Current	$di/dt$	500	A/us	
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	30	°C/W	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	120	°C/W	
Operating Temperature Range	$T_J$	-40 to 150	°C	
Storage Temperature Range	$T_{STG}$	-55 to 150	°C	

## Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified).

P/N	Mark	V <sub>S</sub> @100KV/S V MAX	I <sub>S_LMT</sub> mA	V <sub>T</sub> @ I <sub>T</sub> V MAX	I <sub>T</sub> A	I <sub>D</sub> @ V <sub>D</sub> uA MAX	V <sub>D</sub> V	C <sub>O</sub> @1MHz,2V <sub>DC</sub> pF TYP	I <sub>H</sub> mA MIN
P0080TB-MS	P008B XXXX	25	500	4	2.2	5	6	29	40
P0220TB-MS	P02B XXXX	30	500	4	2.2	5	15	29	40
P0300TB-MS	P03B XXXX	40	500	4	2.2	5	25	28	40
P0640TB-MS	P06B XXXX	77	800	4	2.2	5	58	27	120
P0720TB-MS	P07B XXXX	88	800	4	2.2	5	65	27	120
P0900TB-MS	P09B XXXX	98	800	4	2.2	5	75	27	120
P1100TB-MS	P11B XXXX	130	800	4	2.2	5	90	25	120
P1300TB-MS	P13B XXXX	160	800	4	2.2	5	120	25	120
P1500TB-MS	P15B XXXX	180	800	4	2.2	5	140	24	120
P1800TB-MS	P18B XXXX	220	800	4	2.2	5	170	22	120
P2300TB-MS	P23B XXXX	260	800	4	2.2	5	190	21	120
P2600TB-MS	P26B XXXX	300	800	4	2.2	5	220	20	120
P3100TB-MS	P31B XXXX	350	800	4	2.2	5	275	18	120
P3500TB-MS	P35B XXXX	400	800	4	2.2	5	320	17	120
P4500TB-MS	P45B XXXX	530	800	4	2.2	5	400	13	120

## Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

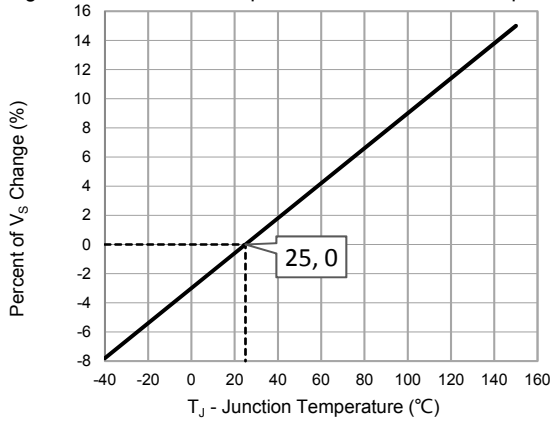


Fig. 1 - Peak Pulse Current Rating

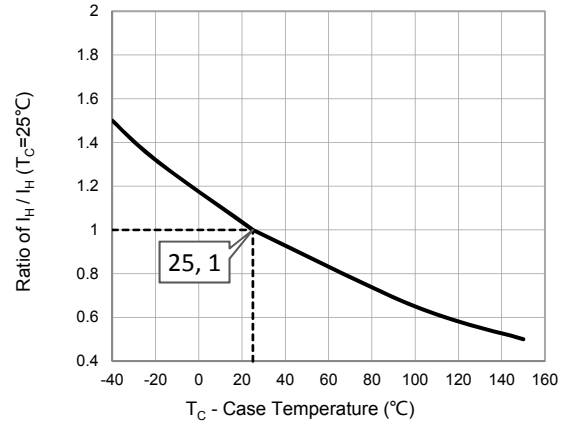


Fig. 2 - Normalized DC Holding Current vs. Case Temperature

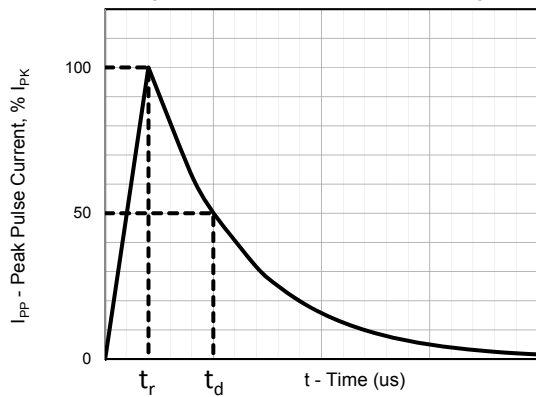


Fig. 3 - tr/td us Pulse Waveform

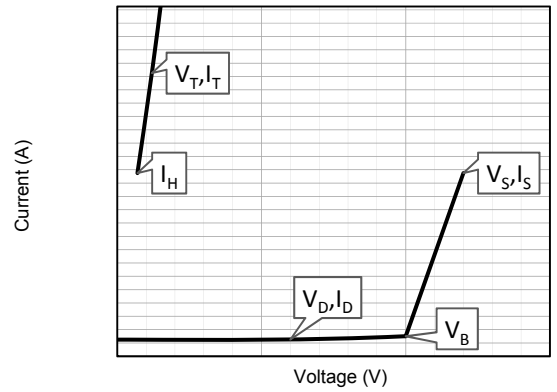


Fig. 4 - VI Curve

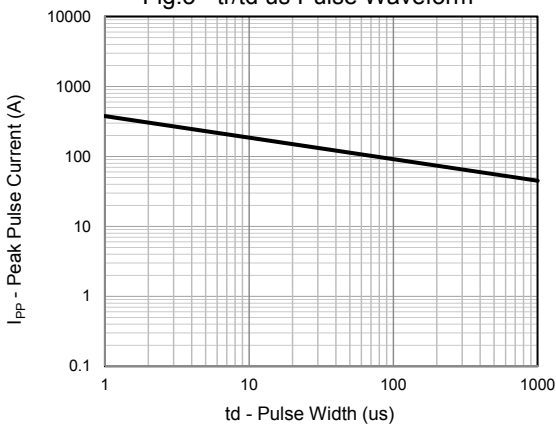


Fig. 5 - Peak Pulse Current Rating

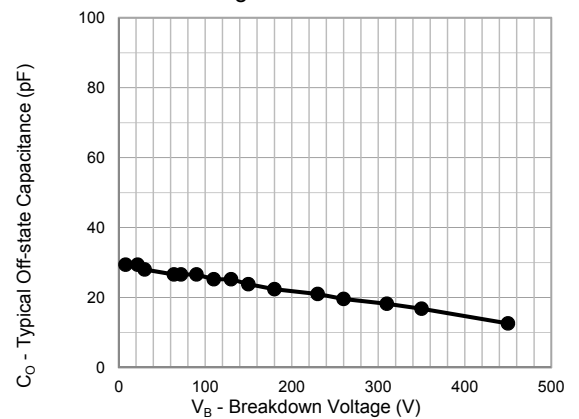
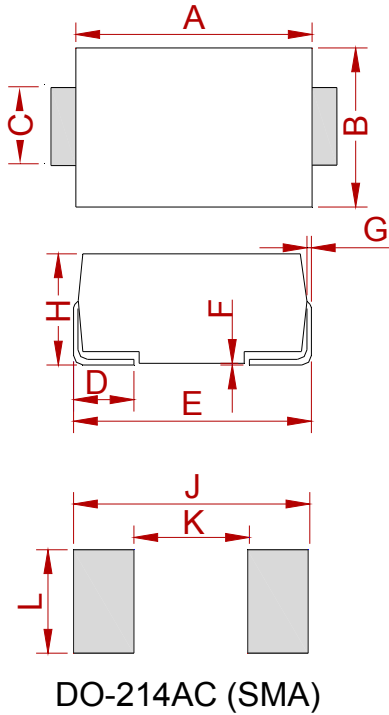


Fig. 6 - Typical Off-state Capacitance

**PACKAGE MECHANICAL DATA**



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

**REEL SPECIFICATION**

P/N	PKG	QTY
PXXXXTB-MS	SMA	5000

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