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PxxxxSC Series

Thyristor Surge Suppresspr

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Features

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

Applications

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

Dimensions and Pin Configuration

SMB

Maximum Ratings & Thermal Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Units	Remarks
Peak Pulse Voltage	V_{PP}	6000	V	10/700us
Peak Pulse Current	I_{PP}	100	A	10/1000us
Peak Pulse Current	I_{PK}	400	A	8/20us
Peak One-cycle Surge Current	I_{TSM}	30	A	60Hz
Rate of Rise of Current	di/dt	500	A/us	
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	20	℃/W	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	℃/W	
Operating Temperature Range	T_J	-40 to 150	℃	
Storage Temperature Range	T_{STG}	-55 to 150	℃	

Part Number	$_S$@100KV/S V MAX	I_{S_LMT} mA	V_T @ I_T V MAX	I_T A	I_D @ V_D uA MAX	V_D V	C_O@1MHz,2V_{DC} pF TYP	I_H mA MIN
P0080SC	25	500	4	2.2	5	6	105	40
P0220SC	30	500	4	2.2	5	15	105	40
P0300SC	40	500	4	2.2	5	25	100	40
P0640SC	77	800	4	2.2	5	58	95	120
P0720SC	88	800	4	2.2	5	65	95	120
P0900SC	98	800	4	2.2	5	75	95	120
P1100SC	130	800	4	2.2	5	90	90	120
P1300SC	160	800	4	2.2	5	120	90	120
P1500SC	180	800	4	2.2	5	140	85	120
P1800SC	220	800	4	2.2	5	170	80	120
P2300SC	260	800	4	2.2	5	190	75	120
P2600SC	300	800	4	2.2	5	220	70	120
P3100SC	350	800	4	2.2	5	275	65	120
P3500SC	400	800	4	2.2	5	320	60	120
P4500SC	550	800	4	2.2	5	400	45	120

Typical Performance Characteristics (T_A=25℃ unless otherwise Specified)

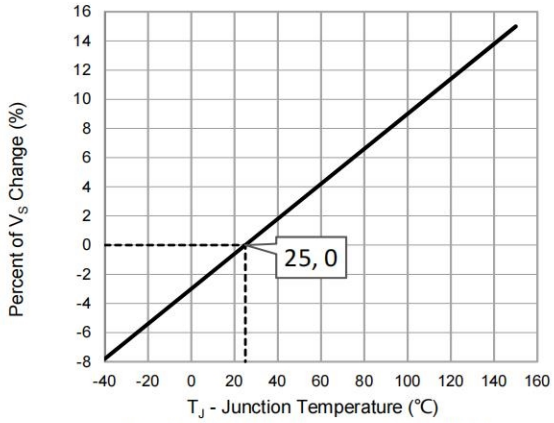


Fig.1 - Peak Pulse Current Rating

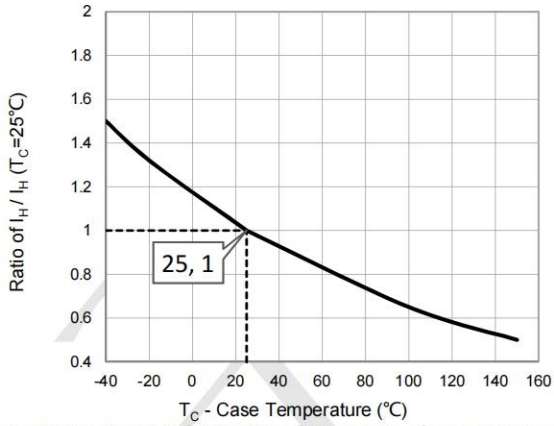


Fig.2 - Normalized DC Holding Current vs. Case Temperature

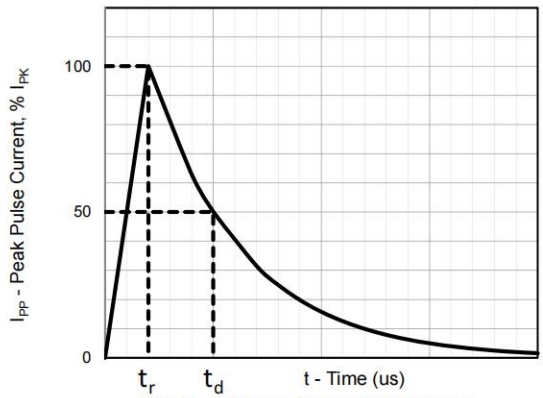


Fig.3 - tr/td us Pulse Waveform

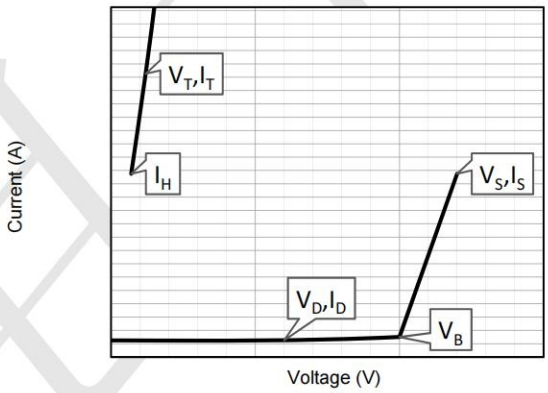


Fig.4 - VI Curve

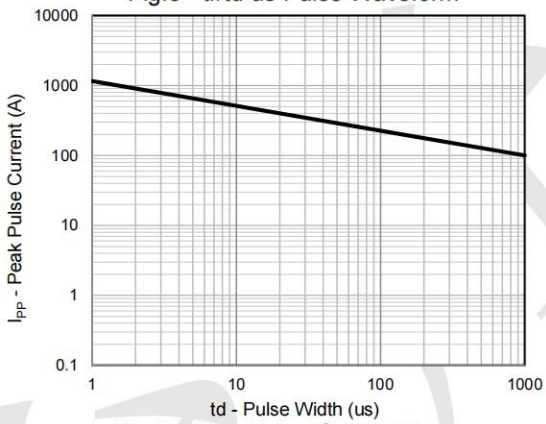


Fig.5 - Peak Pulse Current Rating

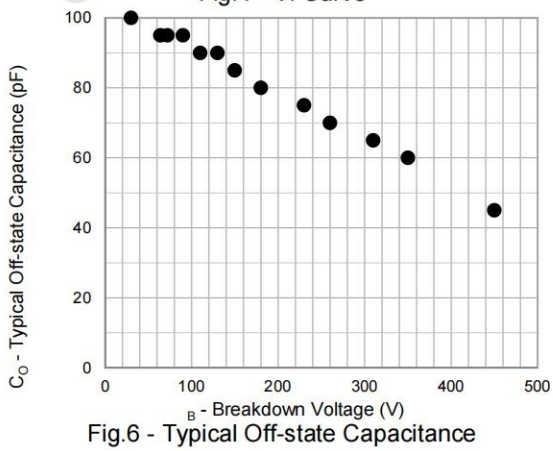
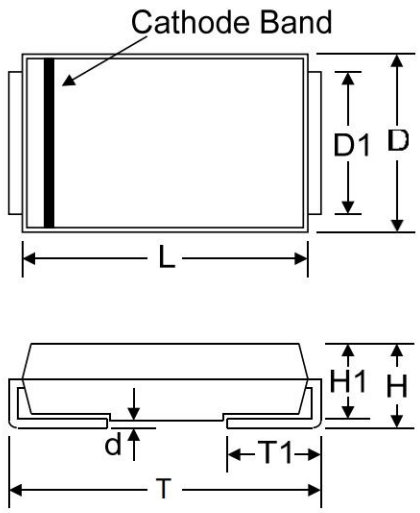


Fig.6 - Typical Off-state Capacitance

Package Outline Dimensions: SMB(DO-214AA)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
L	4.4	4.6	0.173	0.181
D	3.5	3.7	0.138	0.146
D1	1.9	2.1	0.075	0.083
T	5.1	5.48	0.201	0.216
T1	1.0	1.6	0.039	0.063
d	-	0.2	-	0.008
H	2.2	2.45	0.087	0.096
H1	2.15	2.35	0.085	0.093