P0080SC-MCThyristor Surge Suppressor

FEATURES

| Excellent capability of absorbing transient surge

| Quick response to surge voltage

| Eliminates over voltage caused by fast rising transients

| Solid-state silicon te chnology, non degenera



SMB(DO-214AA)



Marking



Schematic Symbol

APPLICATIONS

APPROVALS

HF

RoHS Compliance with 2011/65/EU

Compliance with IEC61249-2-21:2003

| Audio/Video line | Network and telecom | Data lines and security systems | Serial ports

ELECTRICAL CHARACTERISTICS

Part Number	V _{DRM}	V _s	V _T	I _{DRM}	I _s	I _T	I _H	С	0
	Min. (V)	Max. (V)	Max. (V)	Max. (μA)	mA	Max. (A)	Min. (mA)	Typ.(pF)	Max.(pF)
P0080SC-MC	6.0	25.0	4.0	5.0	800.0	2.2	40.0	15.0	35.0

SURGE RATINGS

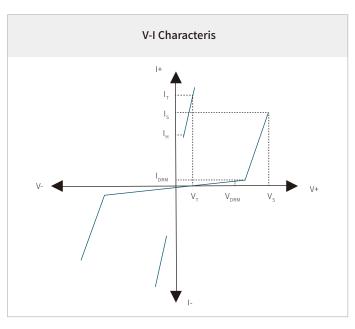
Part Number	Ι _{pp} 2x10μs	Ι _{ΡΡ} 8x20μs	Ι _{թթ} 10x560μs	Ι _{ΡΡ} 10x1000μs	V _{PP} 10x700μs	I _{тsм} 50/60Hz	d _i /d _t
rare wamber	(A)	(A)	(A)	(A)	(V)	(A)	(A/μs)
P0080SC-MC	500	400	150	100	6000	30	500

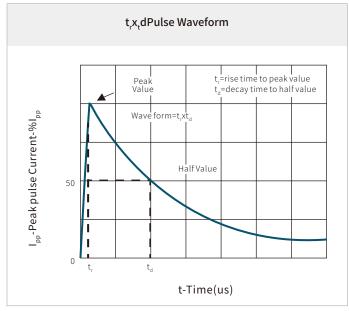


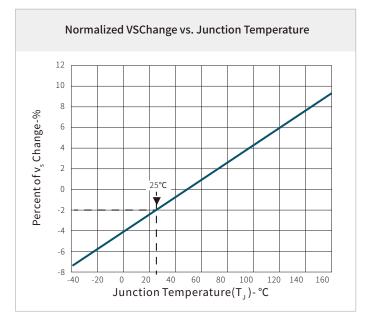
THERMAL CONSIDERATIONS

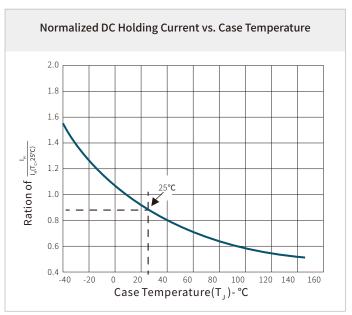
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	90	°C/W
T _J	Operating Junction Temperature	-55 to +125	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

RATINGS AND CHARACTERISTIC CURVES ($T_A = 25$ °C)





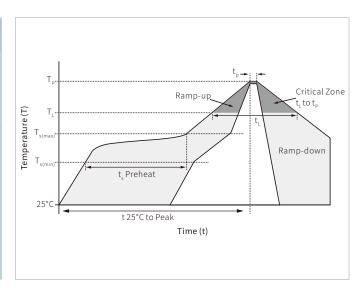




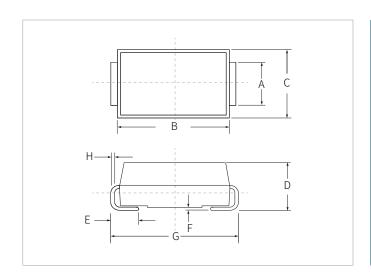


SOLDERING PARAMETERS

	Reflow Condition	Lead-free assembly	
	Temperature Max $(T_{s(min)})$	150°C	
Pre Heat	Temperature Max $(T_{s(max)})$	200°C	
	Time (min to max) (t_s)	60 – 180 secs	
Average rar	mp up rate (Liquidus Temp (T_L) to peak	3°C/second max	
	$T_{s(max)}$ to T_L - Ramp-up Rate	3°C/second max	
Reflow	Temperature (T」) (Liquidus)	217°C	
Renow	Time (min to max) (t_L)	60 – 150 seconds	
Peak Tem	nperature (T₅)	260°C	
Time with	nin 5° C of actual peak Temperature (t_p)	20 – 40 seconds	
Ramp-do	own Rate	6°C/second max	
Time 25°	C to peak Temperature (T♭)	8 minutes max.	
Do not ex	cceed	260°C	



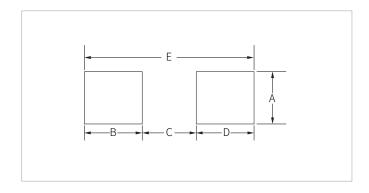
DO-214AA(SMB) PACKAGE INFORMATION



Ref.	Millimeters		inches		
Kei.	Min	Max	Min	Max	
А	1.96	2.20	0.077	0.087	
В	5.10	5.50	0.201	0.216	
С	3.40	3.90	0.134	0.153	
D	2.15	2.75	0.085	0.108	
E	0.76	1.52	0.030	0.060	
F	0.02	0.20	0.001	0.008	
G	5.08	5.59	0.200	0.220	
Н	0.15	0.30	0.006	0.012	



RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millin	neters	Inches		
	Min.	Max.	Min.	Max.	
А	2.20	-	0.087	-	
В	1.45	-	0.057	-	
С	-	2.55	-	0.010	
D	1.45	-	0.057	-	
E	5.60REF		0.22	0REF	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
P0080SC-MC	DO-214AA(SMB)	3000PCS	13"





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