

FEATURES

- | Low leakage current
- | Typical failure mode is short from over-specified voltage or current
- | Glass passivated chip junction in P600 Package
- | Fast response time: typically less than 1.0ps from 0 Volts to V_{BR} min
- | Matte tin lead-free Plated
- | Excellent clamping capability
- | Inductive load switching
- | GPS navigation system



R-6/P-600



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Peak pulse current of at 8/20 μ s waveform	I_{PPM}	3000	A
Steady state power dissipation at $T_L=75^{\circ}\text{C}$	$P_{M(AV)}$	8.0	W

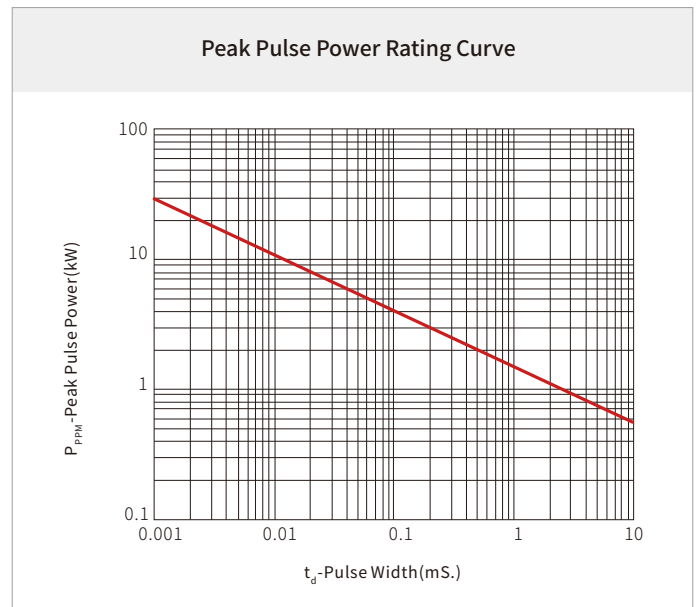
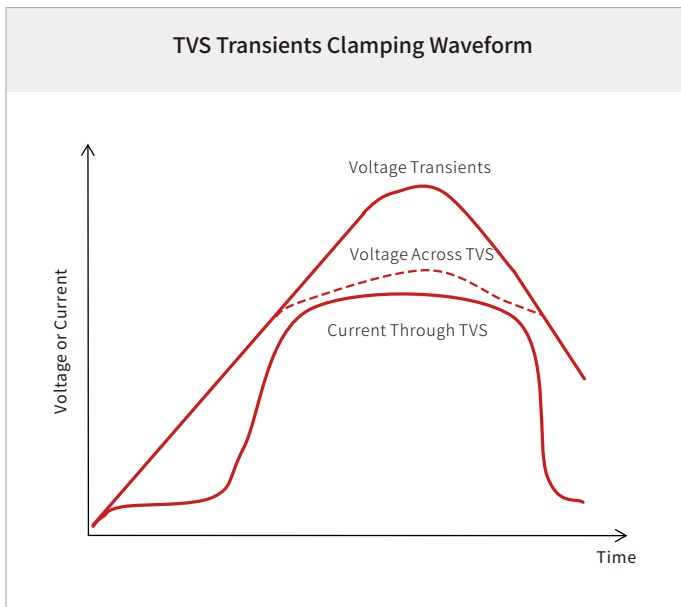
THERMAL CONSIDERATIONS

Parameter	Symbol	Value	Unit
Operating Junction Temperature	T_J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	55 to +150	$^{\circ}\text{C}$
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	40	$^{\circ}\text{C/W}$

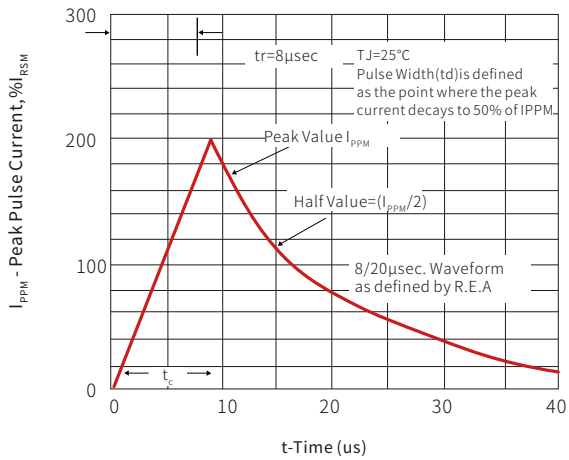
ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	Reverse Stand-off Voltage	Breakdown Voltage Min.@ I_T	Breakdown Voltage Max.@ I_T	Test Current	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Maximum Reverse Leakage @ V_{RWM}
		V_{RWM} (V)	V_{BR} (V)	V_{BR} (V)	I_T (mA)	V_C (V)	I_{PP} (A)	I_R (μ A)
SBT66CA	3-066C	66.0	72.0	80.0	10	120	3000	10

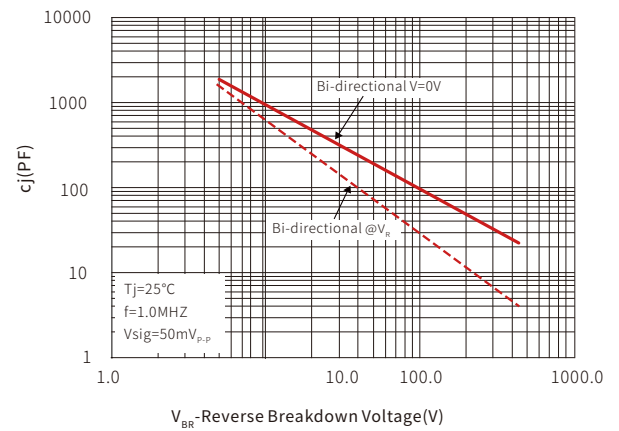
CHARACTERISTIC CURVES



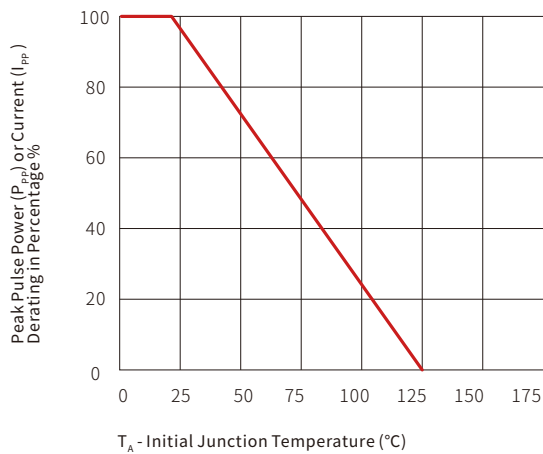
Pulse Waveform



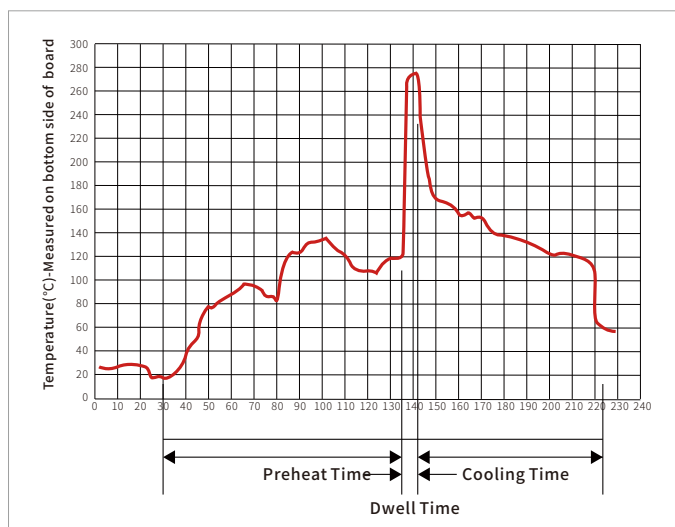
Typical Junction Capacitance



Pulse Derating Curve

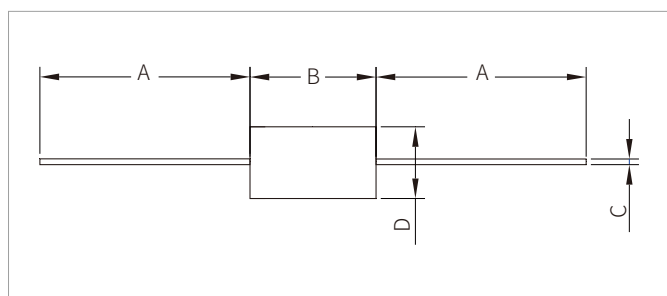


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

P600 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	8.60	9.40	0.339	0.370
C	1.20	1.40	0.047	0.055
D	8.60	9.10	0.339	0.358

ORDERING INFORMATION

Part Number	Component Package	Quantity	Packaging Option
SBT66CA	R6/P600	800pcs	Box

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By QR Code

Website



Wechat

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