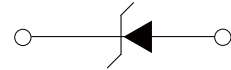


FEATURES

- | The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- | Guardring for overvoltage protection
- | Low reverse leakage
- | High forward surge current capability



R-6/P-600



Schematic Symbol

APPLICATIONS

- | Case : Molded plastic body
- | Polarity : Polarity symbol marking on body
- | Mounting Position : Any

APPROVALS

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

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	30.5	V
Maximum DC blocking voltage	V_{DC}	45	V
Maximum average forward rectified current at $T_L=110^{\circ}\text{C}$	$I_{(AV)}$	30.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400	A
Typical thermal resistance	$R_{\theta JA}$	25	$^{\circ}\text{C/W}$
	$R_{\theta JL}$	10	$^{\circ}\text{C/W}$
Operating junction temperature	T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum instantaneous forward voltage at 30.0A	V_F		0.52	0.55	V
Maximum DC reverse current at rated DC blocking voltage	I_R		50	200	μA
			5	20	mA

CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

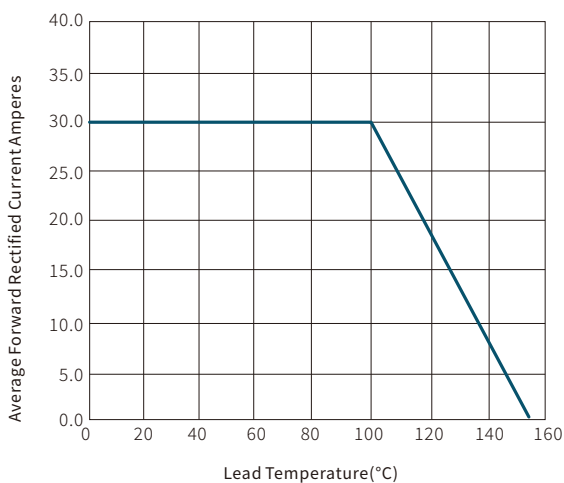


Fig. 2-maximum Non-repetitive Peak Forward Surge Current Perleg

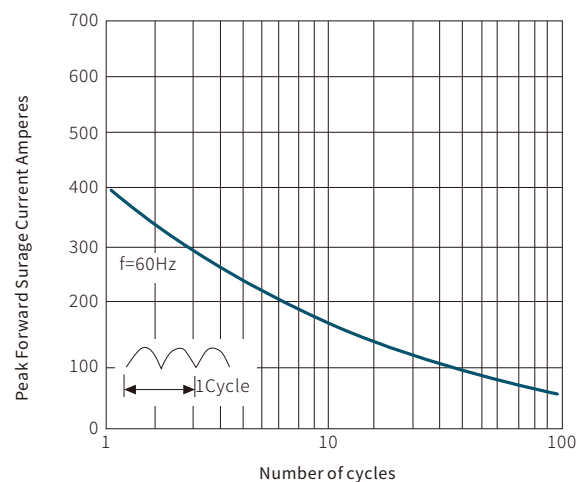


Fig. 3-Typical Forward Voltage Characteristics

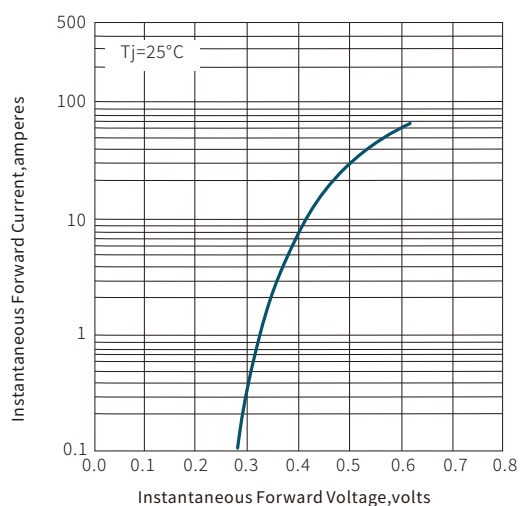
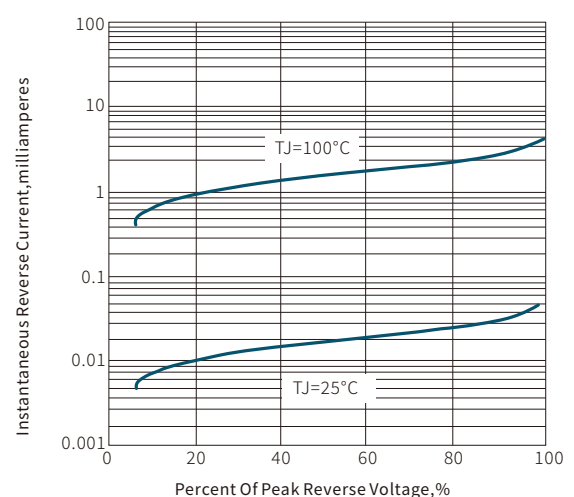
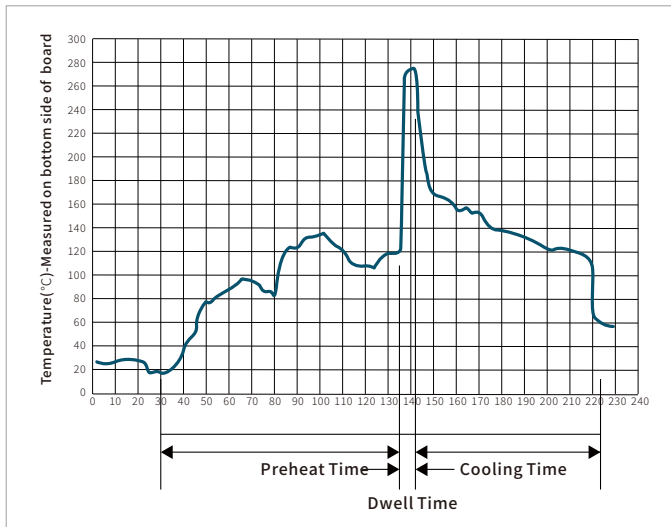


Fig. 4-Typical Reverse Leakage Characteristics

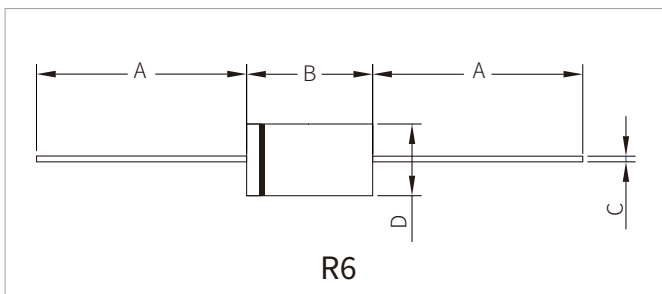


WAVE SOLDERING



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	Marking	Component Package	QTY/Box	Q'TY/Carton
30SQ045	30SQ045	R6/P600	500pcs	5000pcs

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