

FEATURES

- | High current capability
- | High surge current capability
- | High reliability
- | Low reverse current
- | Low forward voltage drop



R-6/P-600



Schematic Symbol

MECHANICAL DATA

- | Case: JEDEC R-6 molded plastic
- | Polarity: Color band denotes cathode
- | Mounting position: Any

APPROVALS

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

MAXIMUM RATINGS AND CHARACTERISTICS (T_A = 25°C)

Parameter	Symbol	20A05	20A1	20A2	20A4	20A6	20A8	20A10	Unit	
Marking		20A05	20A1	20A2	20A4	20A6	20A8	20A10		
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T _A = 60°C	I _{F(AV)}	20.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	400							A	
Maximum Instantaneous Forward Voltage at I _F = 20A	V _F	1.0						1.1	V	
Maximum DC reverse current at rated DC blocking voltage	T _A = 25°C	I _R							5.0	uA
	T _A = 100°C	I _{R(HI)}							1.0	mA
Typical junction capacitance at 4.0V, 1MHz	C _J	150							pF	
Typical Thermal Resistance (1)	R _{θJA}	20							°C/W	
Operating junction temperature range	T _J	-55 to +150							°C	
Storage temperature range	T _{STG}	-55 to +150							°C	

Notes:

Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 1.1" x 1.1" (30 x 30mm) copper pads

CHARACTERISTIC CURVES

Fig.1 Maximum Forward Current Derating Current

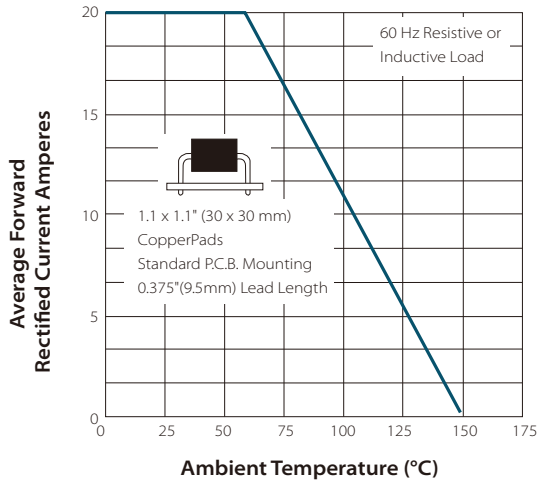


Fig.2 Typical Instantaneous Forward Characteristics

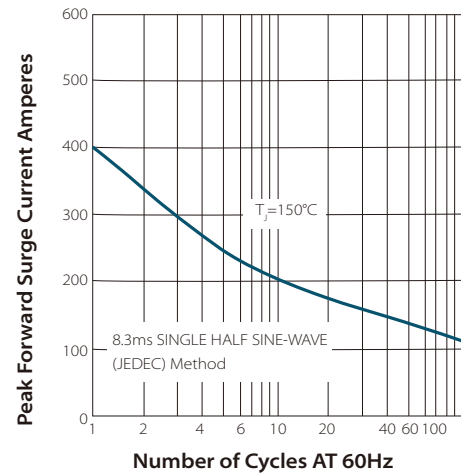


Fig.3 Typical Instantaneous Forward Characteristics

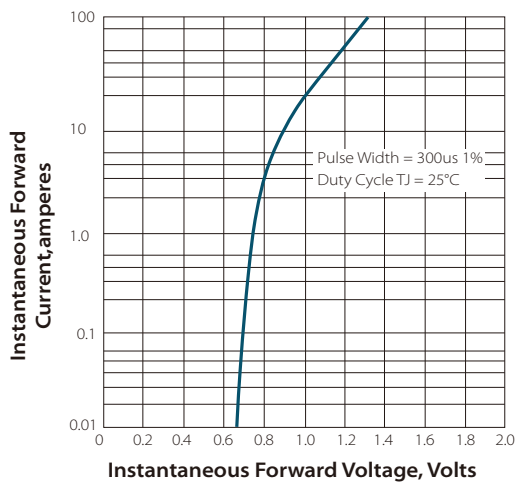
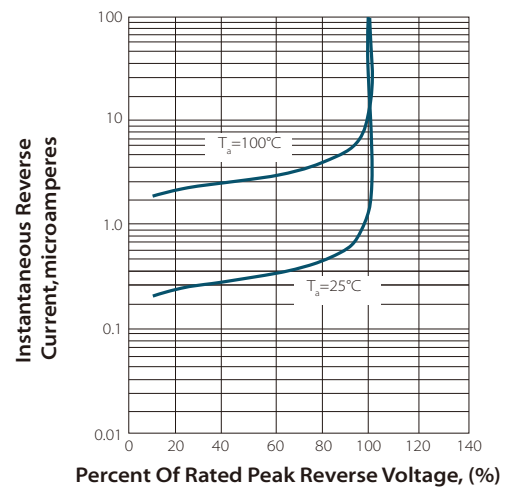
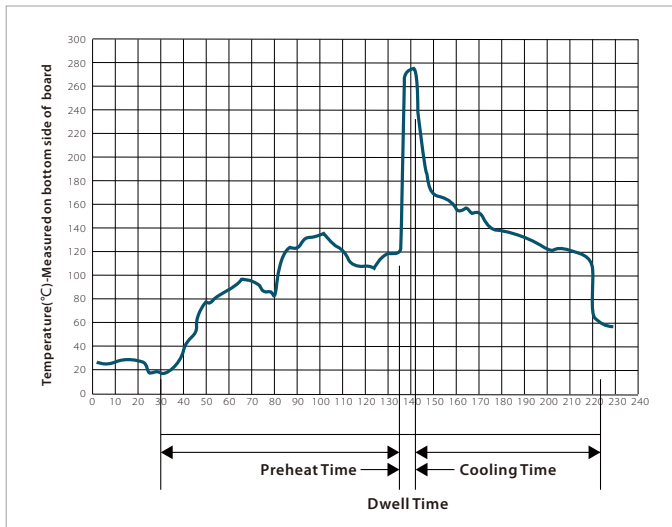


Fig.4 Typical Reverse Characteristics

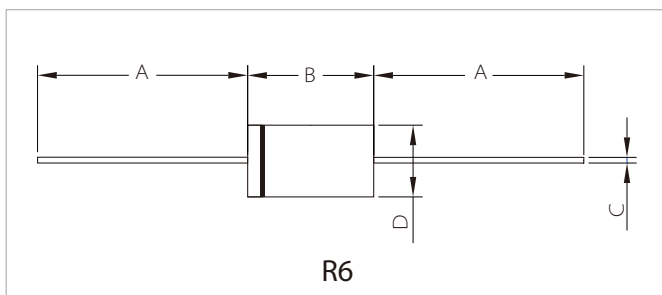


WAVE SOLDERING



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	Component Package	QTY/Tape
20A05-20A10	R6/P600	400

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