

FEATURES

- Low forward voltage drop
- Low leakage current
- High forward surge capability



R-6/P-600



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

Parameter		Symbol	10A05	10A1	10A2	10A4	10A6	10A8	10A10	Unit
Marking			10A05	10A1	10A2	10A4	10A6	10A8	10A10	
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		I _{F(AV)}	10							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed On Rated Load		I _{FSM}	300							A
Maximum Forward Voltage at 10A DC		V _F	1.10							V
Maximum Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	10							μA
	T _A =100°C		100							μA
Typical Junction Capacitance (Note 1)		C _J	125							pF
Typical Thermal Resistance		R _{θJA}	8							°C/W
Operating Junction Temperature Range		T _J	-55 to +150							°C
Storage Temperature Range		T _{STG}	-55 to +150							°C

Notes:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC

CHARACTERISTIC CURVES

Fig.1 Typical Forward Current Derating Curve

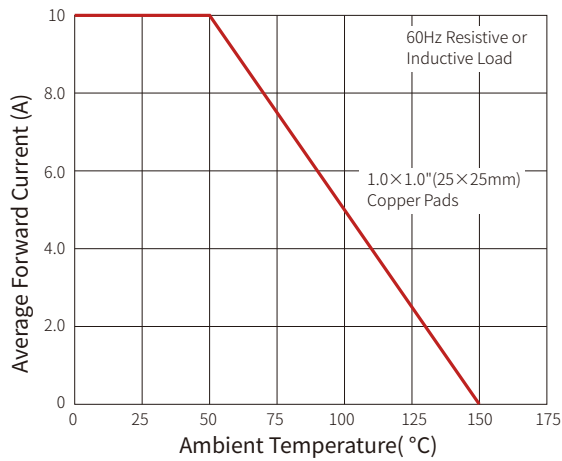


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

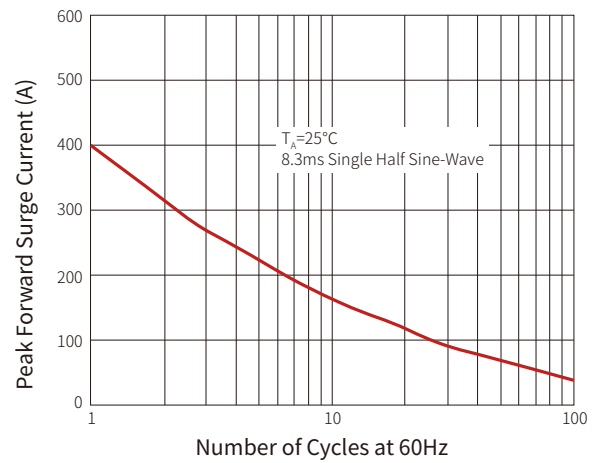


Fig.3 Typical Instantaneous Forward Characteristics

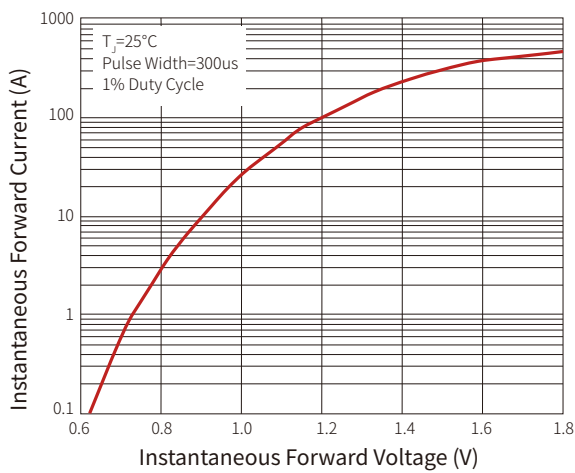


Fig.4 Typical Reverse Characteristics

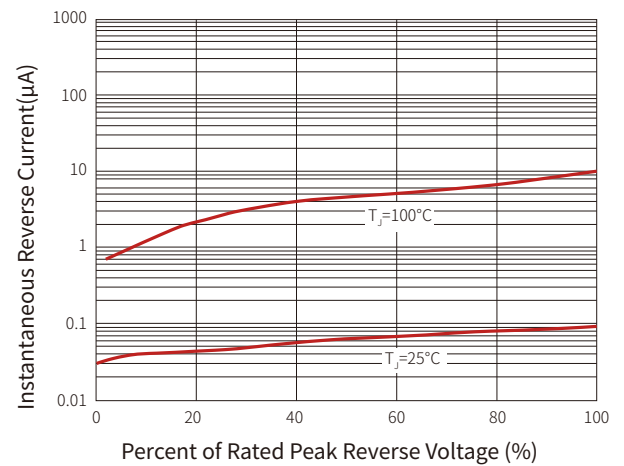
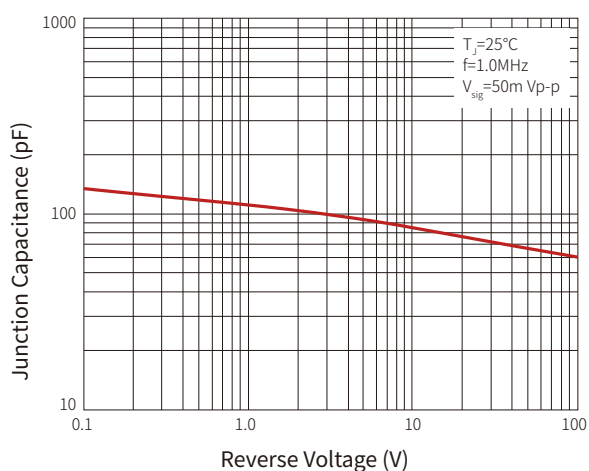
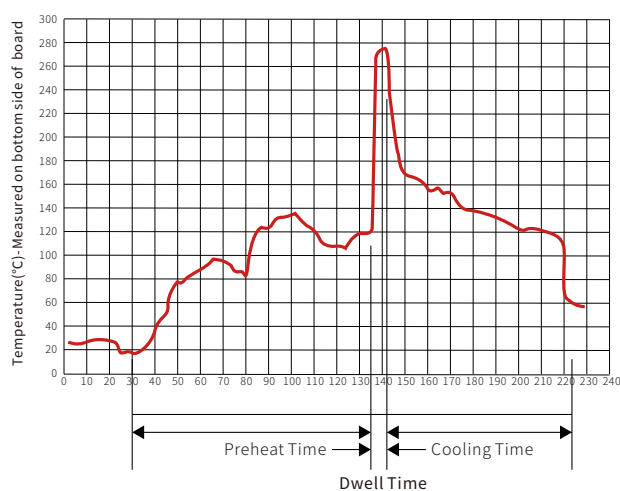


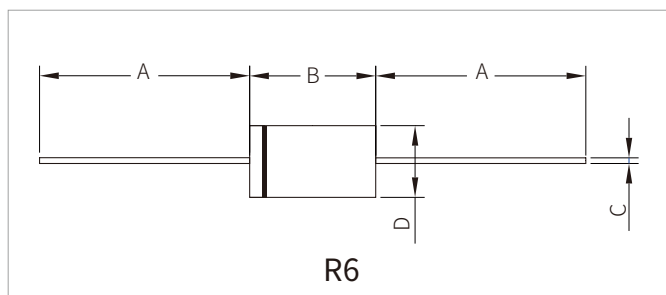
Fig.5 Typical Junction Capacitance


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
10A05-10A10	R6/P600	400

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