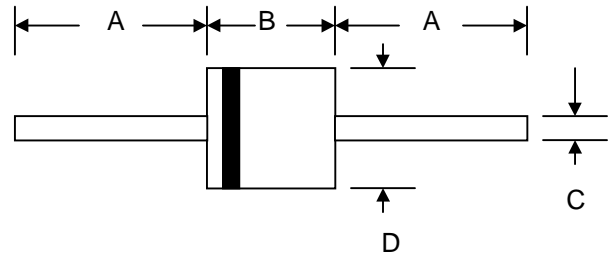


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



### Mechanical Data

- Case: P-600, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

P-600		
Dim	Min	Max
A	25.4	—
B	8.60	9.10
C	1.20	1.30
D	8.60	9.10
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	P600A	P600B	P600D	P600G	P600J	P600K	P600M	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 60^\circ\text{C}$	$I_O$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							A
Forward Voltage @ $I_F = 6.0\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 1.0							$\mu\text{A}$ mA
Typical Junction Capacitance (Note 2)	$C_j$	150							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	20							$^\circ\text{C/W}$
Operating Temperature Range	$T_j$	-50 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-50 to +150							$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

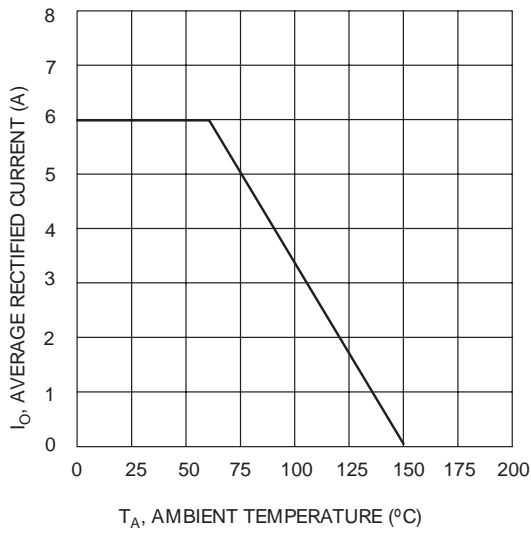


Fig. 1 Forward Current Derating Curve

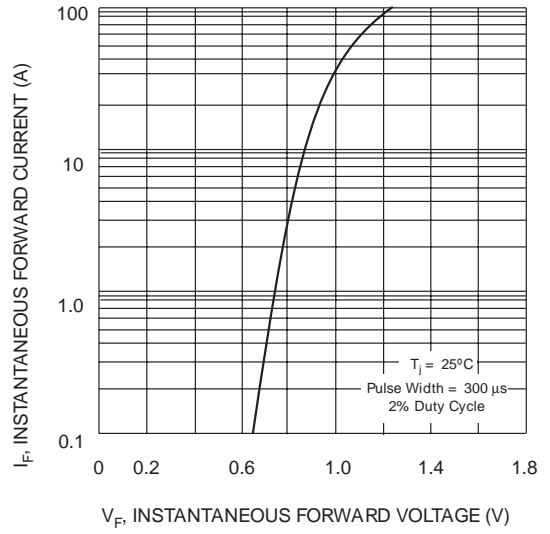


Fig. 2, Typical Forward Characteristics

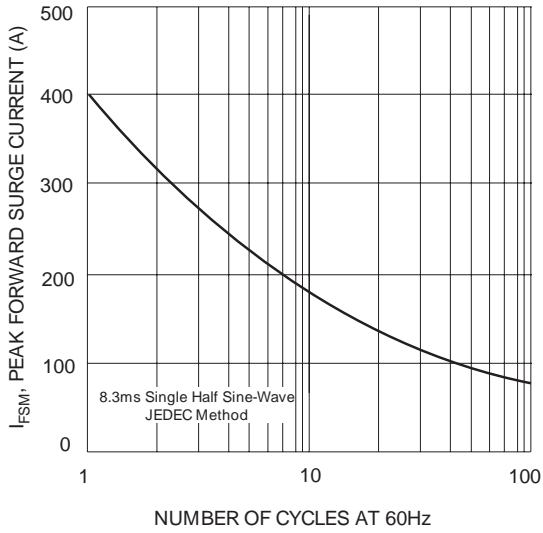


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

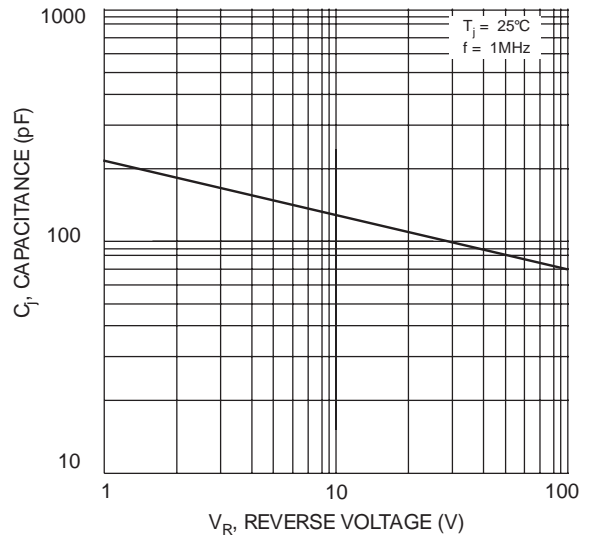


Fig. 4 Typical Junction Capacitance



## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
<b>P600A-T3</b>	P-600	800/Tape & Reel
P600A	P-600	250 Units/Box
<b>P600B-T3</b>	P-600	800/Tape & Reel
P600B	P-600	250 Units/Box
<b>P600D-T3</b>	P-600	800/Tape & Reel
P600D	P-600	250 Units/Box
<b>P600G-T3</b>	P-600	800/Tape & Reel
P600G	P-600	250 Units/Box
<b>P600J-T3</b>	P-600	800/Tape & Reel
P600J	P-600	250 Units/Box
<b>P600K-T3</b>	P-600	800/Tape & Reel
P600K	P-600	250 Units/Box
<b>P600M-T3</b>	P-600	800/Tape & Reel
P600M	P-600	250 Units/Box

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, P600A-T3-LF.**

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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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