



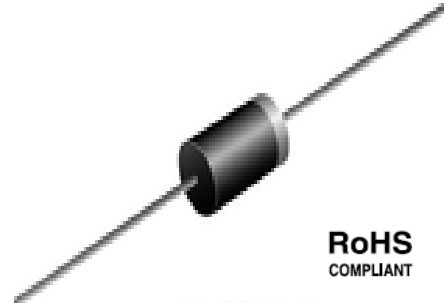
# GENERAL PURPOSE RECTIFIER BY251 ~ BY255

## General Purpose Rectifier

### Features

- Glass passivated chip junction
- Low forward voltage
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 260/10 seconds

0.375" (9.5mm) lead length



RoHS  
COMPLIANT

DO-201AD

### Mechanical Data

<b>Case:</b>	Transfer molded plastic
<b>Epoxy:</b>	UL94V-0 rate flame retardant
<b>Terminals:</b>	Plated axial lead, solderable per MIL-STD-202E, Method 208C
<b>Polarity:</b>	Color band denotes cathode end
<b>Mounting position:</b>	Any
<b>Weight:</b>	0.042 Ounce, 1.19 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

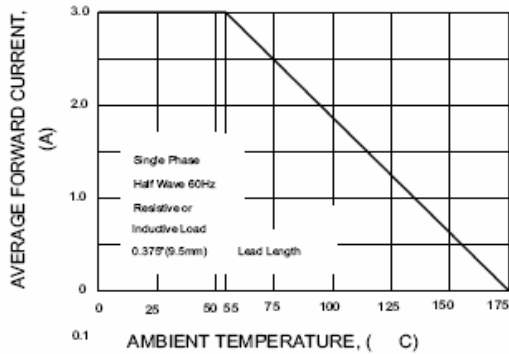
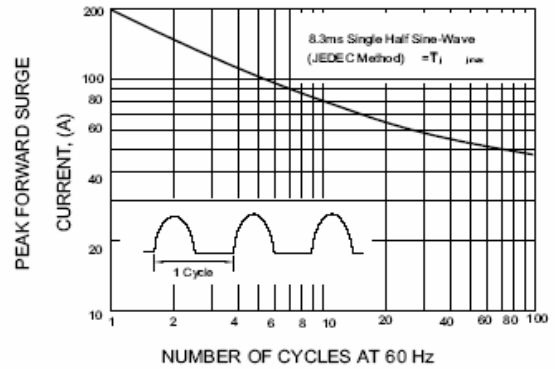
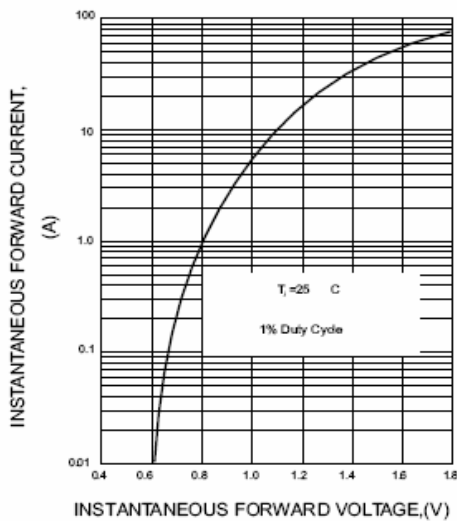
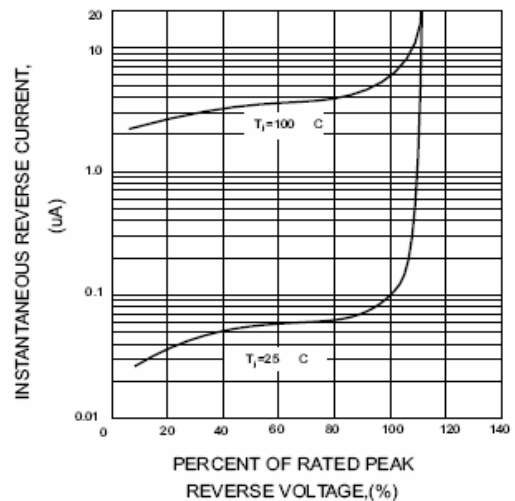
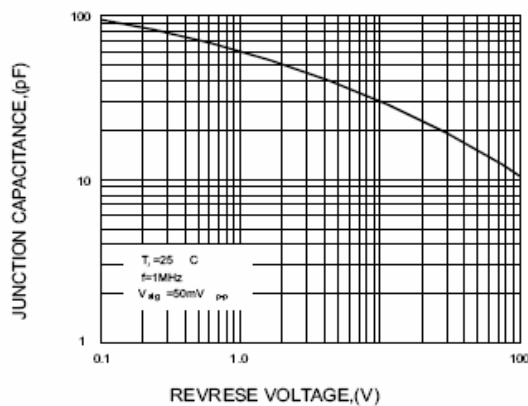
Symbol	Description	P300A	P300B	P300D	P300G	P300J	P300K	P300M	Unit	Conditions
VRRM	Non-Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Maximum Average Forward Rectifier Current	3.0							Amps	0.375"(9.5mm) at $T_A=55^{\circ}C$
IFSM	Peak Forward Surge Current	200							Amps	8.3ms Single half sine wave (JEDEC method)
TJ, TSTG	Operating and Storage Temperature	-65 to +175							$^{\circ}C$	
IR	Maximum DC Reverse Current at Rated DC Blocking Voltage per element	10.0							$\mu A$	$T_A=25^{\circ}C$
		500								$T_A=150^{\circ}C$

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

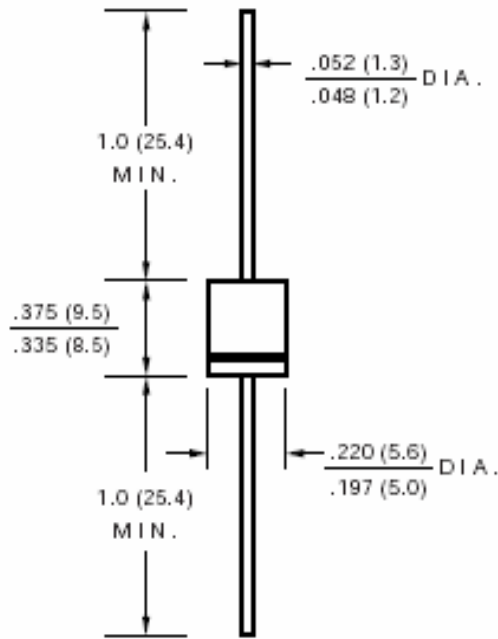
Symbol	Description	Unit	Conditions
VF	Max Instantaneous Forward Voltage	V	3.0A
IR(AV)	Maximum Full Load Reverse Current	$\mu A$	Full cycle average 0.375"(9.5mm) lead length at $T_L=105^{\circ}C$
CJ	Typical Junction Capacitance	pF	1.0MHz & 4.0V
R $\theta$ -JA	Typical Thermal Resistance	$^{\circ}C/W$	Note 1

#### Note:

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted with 0.8" x 0.8" (20mm x 20mm) copper pads

**Ratings And Characteristic Curves P300A-M:**
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**

**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**FIG.3-TYPICAL INSTANTANEOUS**

**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

**FIG.5-TYPICAL JUNCTION CAPACITANCE**


Dimensions in inch (mm)



**DO-27**

Contact us:

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