

RA251 THRU RA257

25 Amp Standard Rectifier 50 to 1000 Volts

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Plastic Material Used Carriers Underwrites Laboratory Flammability Classification 94V-0 and MSL Rating 1
- Low Cost Construction Utilizing Void-free Molded Plastic Technique
- High Surge Capability
- Diffused Junction

Maximum Ratings

- Operating & Storage Temperature: -50°C to +150°C
- For Capacitive Load, Derate Current by 20%

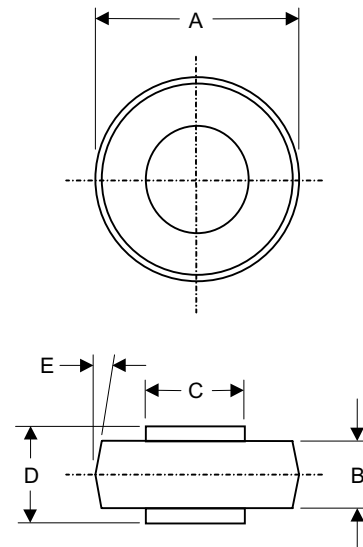
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RA251	50V	35V	50V
RA252	100V	70V	100V
RA253	200V	140V	200V
RA254	400V	280V	400V
RA255	600V	420V	600V
RA256	800V	560V	800V
RA257	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25.0A	$T_C=125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	400A	8.3ms half sine
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_{FM}=25.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA	$T_C=25^\circ\text{C}$
Typical Reverse Recovery Times	t_{rr}	3.0us	$I_F=0.5A,$ $I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_j	300pF	Measured at 1.0MHz, $V_R=4.0V$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

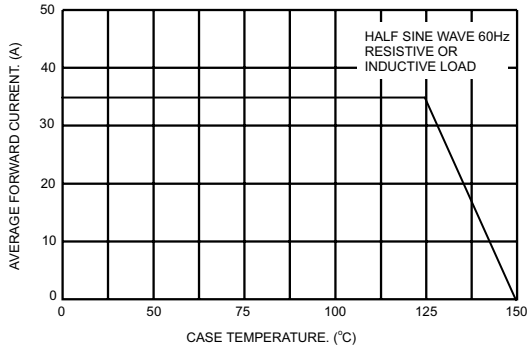
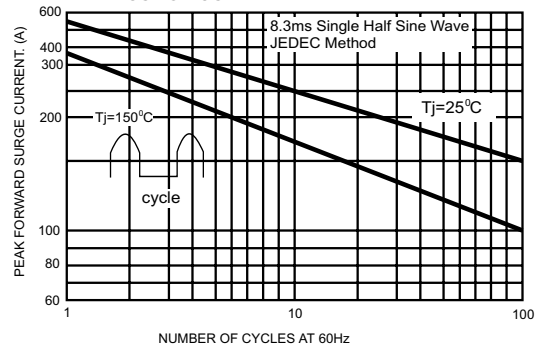
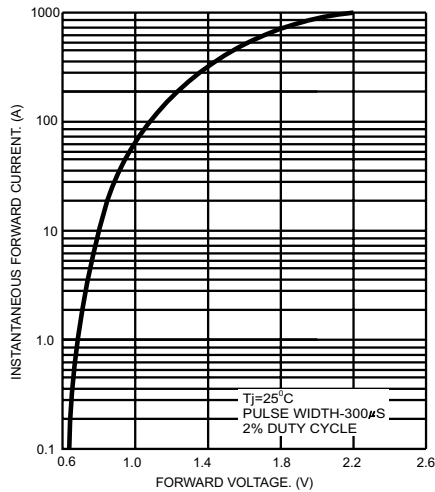
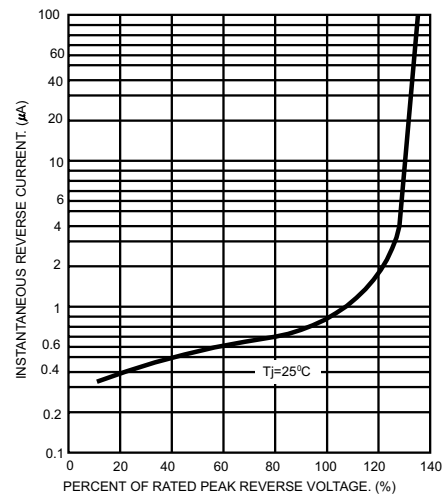
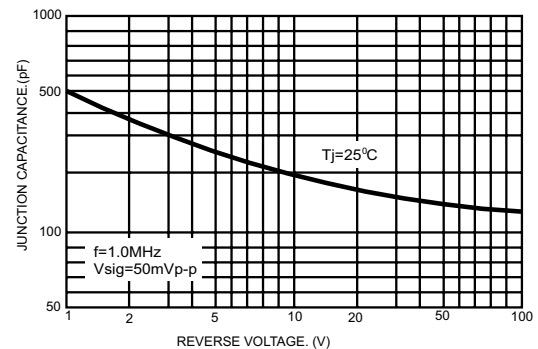
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DIMENSION					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.380	.410	9.70	10.40	
B	.165	.185	4.19	4.70	
C	.215	.225	5.50	5.70	
D	.235	.250	6.00	6.40	
E	----	5°	----	5°	NOM

RA251 thru RA257

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

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

FIG.3- TYPICAL FORWARD CHARACTERISTICS

FIG.4- TYPICAL REVERSE CHARACTERISTICS

FIG.5- TYPICAL JUNCTION CAPACITANCE




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Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

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