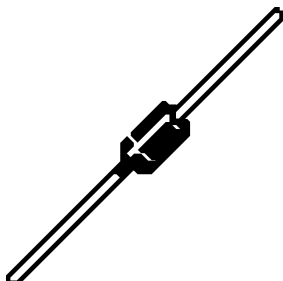


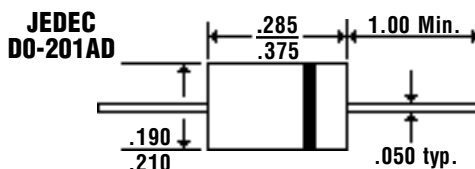
3.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

BY251 . . . 255 Series

Description



Mechanical Dimensions



Features

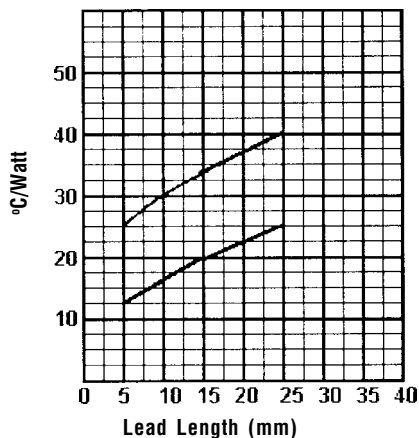
- LOW COST
- HIGH CURRENT CAPABILITY
- DIFFUSED JUNCTION
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	BY251 . . . 255 Series					Units
Maximum Ratings	BY251	BY252	BY253	BY254	BY255	
Peak Repetitive Reverse Voltage... V_{RRM}	200	400	600	800	1300	Volts
RMS Reverse Voltage... $V_{R(rms)}$	140	280	420	560	910	Volts
DC Blocking Voltage... V_{DC}	200	400	600	800	1300	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 50^\circ\text{C}$ (Note 3)	.....	.....	3.0	.....	.....	Amps
Repetitive Peak Forward Surge Current... I_{FM}	.....	.....	20	.....	.....	Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp	.....	.....	100	.....	.....	Amps
Forward Voltage @ 3.0A... V_F	.....	.....	1.1	.....	.....	Volts
DC Reverse Current... I_R	.....	.....	20	.....	.....	μAmps
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)	.....	.....	30	.....	.....	$^\circ\text{C} / \text{W}$
Operating & Storage Temperature Range... T_J, T_{STRG}	.....	.....	-50 to 150	.....	.....	$^\circ\text{C}$

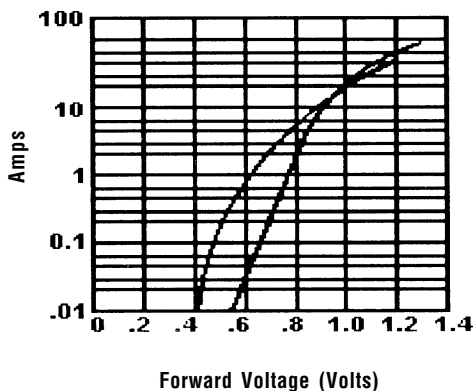
3.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

BY251 ... 255 Series

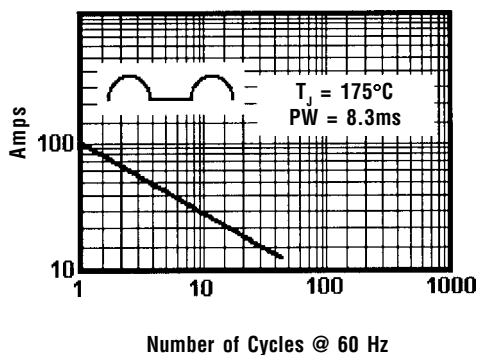
Thermal Resistance



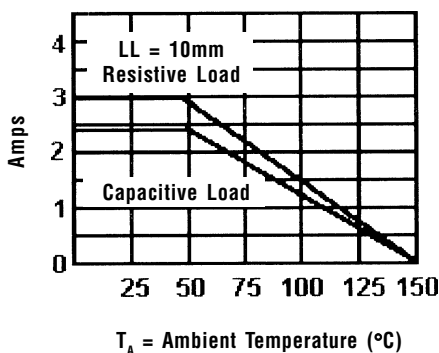
Instantaneous Forward Characteristics



Peak Forward Surge Current



Forward Current Derating Curve



Ratings at
25 Deg. C ambient
temperature
unless otherwise
specified.

Single Phase Half
Wave, 60 HZ
Resistive or
Inductive Load.

For Capacitive
Load, Derate
Current by 20%.

- NOTES:**
1. Measured @ 1 MHZ and applied reverse voltage of 4.0V.
 2. Thermal Resistance Junction to Ambient, Jedec Method.
 3. When Mounted to heat sink, from body.