

TECHNICAL DATA  
DATA SHEET 175, REV. C

## HERMETIC AXIAL LEAD/MELF RECTIFIER

DESCRIPTION: A 600 VOLT, 1.0 AMP, 250 NANOSECOND AXIAL LEAD MELF RECTIFIER

### MAXIMUM RATINGS

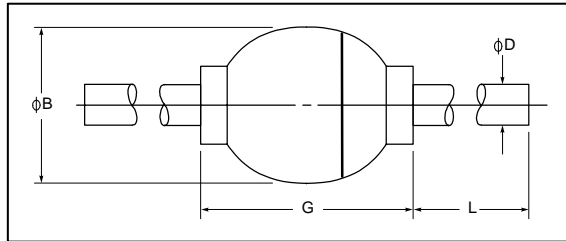
All ratings are at  $T_A = 25^\circ\text{C}$  unless otherwise specified.

RATING	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Peak Inverse Voltage (PIV)	-	-	-	600	Vdc
Average DC Output Current ( $I_o$ )	$T_A = +75^\circ\text{C}$	-	-	1.0	Amps
Average DC Output Current ( $I_o$ )	$T_A = +100^\circ\text{C}$	-	-	.75	Amps
Peak Single Cycle Surge Current ( $I_{ism}$ )	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	25	Amps(pk)
Operating and Storage Temp. ( $T_{op}$ & $T_{stg}$ )	-	-65	-	+175	$^\circ\text{C}$
Thermal Resistance ( $\theta_{JL}$ )	$d = 0.375''$	-	-	38	$^\circ\text{C/W}$
Thermal Resistance ( $\theta_{JEC}$ )	Junction to end caps	-	-	7.0	$^\circ\text{C/W}$

### ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Maximum Forward Voltage ( $V_f$ )	$I_f = 3.0\text{A}$ (300 $\mu\text{sec}$ pulse, duty cycle < 2%)	-	-	1.6	Volts
Maximum Instantaneous Reverse Current At Rated PIV ( $I_R$ )	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	0.5 25	$\mu\text{Amps}$
Reverse Recovery Time ( $t_{rr}$ )	$I_f = 0.5\text{A}$ , $I_r = 0.5\text{A}$ , $I_{rr} = 50\text{mA}$	-	-	250	nsec

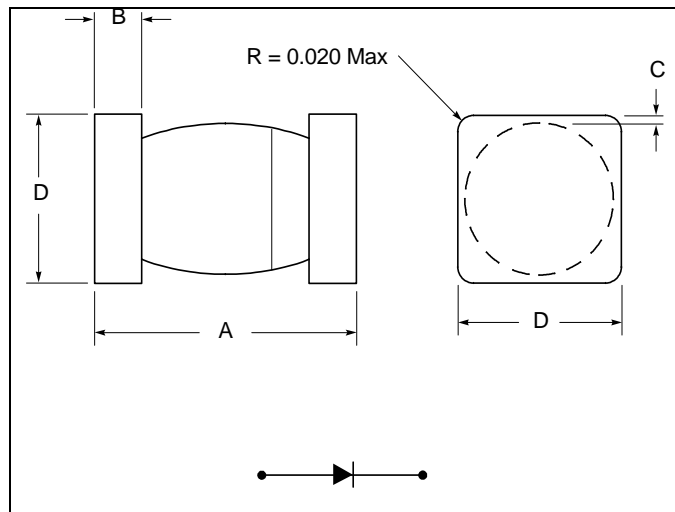
AXIAL LEAD RECTIFIER OUTLINES



**Note:** Cathode side of device is indicated by a dark band marked on body.

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	$\phi B$	$\phi D$	G	L
102	.065/.110 1.65/2.79	.026/.033 .66/.84	.130/.225 3.30/5.72	1.00/1.30 25.4/33.0

MELF PACKAGE OUTLINES



**Note:** Cathode side of device is indicated by a dark band marked on body.

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	A	B	C	D
MELF-1	.168/.230 4.2/5.9	0.019/.028 .48/.72	.003 Min .076 Min	.091/.128 2.31/3.25

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