MOTOROLA

MLL4001 thru MLL4004

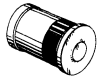
Advance Information

LEADLESS SURFACE MOUNTED RECTIFIERS

... subminiature size, surface mounted rectifiers for general-purpose low-power applications.

LEADLESS SURFACE MOUNTED SILICON RECTIFIERS

50-400 VOLTS DIFFUSED JUNCTION



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MAXIMUM RATINGS

Rating	Symbol	MLL 4001	MLL 4002	MLL 4003	MLL 4004	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	Volts
Nonrepetitive Peak Reverse Voltage (halfwave, single phase, 60 Hz)	V_{RSM}	60	120	240	480	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	Volts
Average Rectified Forward Current (single phase, resistive load, 60 Hz, T_A = 75°C)	I_O	1.0				Amp
Nonrepetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	20 (for 1 cycle)				Amp
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +175				°C

ELECTRICAL CHARACTERISTICS

Characteristic and Conditions	Symbol	Typ	Max	Unit
Maximum Instantaneous Forward Voltage Drop (i_F = 1.0 Amp, T_J = 25°C)	v_F	0.95	1.1	Volts
Maximum Full-Cycle Average Forward Voltage Drop (I_O = 1.0 Amp, T_C = 75°C)	$V_{F(AV)}$	—	0.8	Volts
Maximum Reverse Current (rated dc voltage) T_J = 25°C T_J = 100°C	I_R	0.05 1.0	10 100	μA
Maximum Full-Cycle Average Reverse Current (I_O = 1.0 Amp, T_C = 75°C)	$I_{R(AV)}$	—	30	μA

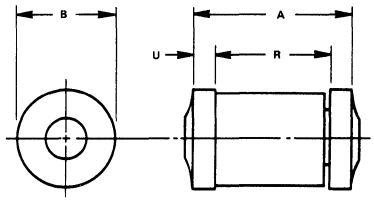
MECHANICAL CHARACTERISTICS

CASE: Glass

MAXIMUM LEAD TEMPERATURE FOR SOLDERING PURPOSES: 230°C @ end caps for 10 seconds

FINISH: All external surfaces are corrosion-resistant, end caps are readily solderable

POLARITY: Cathode indicated by color band



DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES MAX
A	4.80	5.20	0.189	0.205
B	2.44	2.54	0.096	0.100
R	3.71	4.59	0.146	0.181
U	0.36	0.50	0.014	0.020

CASE 362B-01

This document contains information on a new product. Specifications and information herein are subject to change without notice.