

### GENERAL PURPOSE SILICON RECTIFIER VOLTAGE RANGE 50 TO 1000 Volts Current 3 Ampere

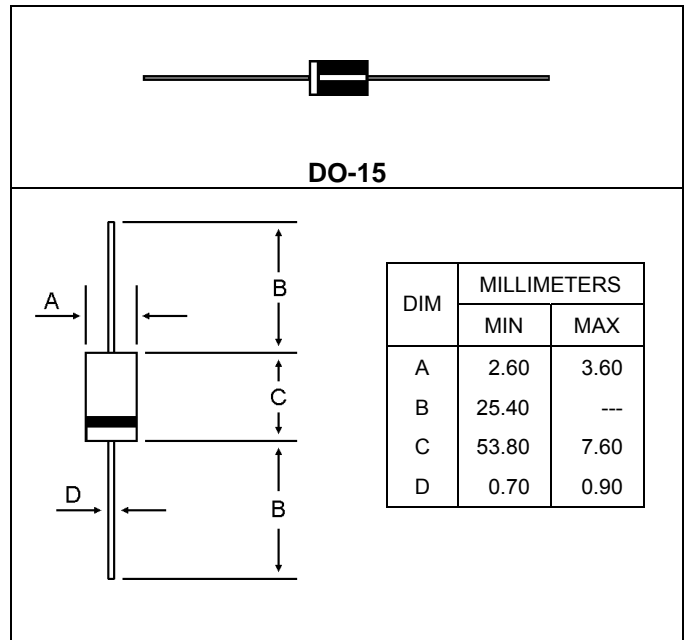
#### FEATURES

- \* Low forward voltage drop
- \* Low reverse leakage
- \* High forward surge current capability
- \* High temperature soldering guaranteed  
260 /10 seconds, 0.375"(9.5 mm) lead length  
at 5 lbs(2.3kg) tension

#### MECHANICAL DATA

- \* Case : Transfer Molded Plastic
- \* Epoxy: UL94V-O rate flame retardant
- \* Polarity : Color band denotes cathode end
- \* Lead : Plated axial lead, solderable per MIL-STD-202E  
method 208C
- \* Mounting position: Any
- \* Weight : 0.014 ounce. 0.39 gram (approx)

Plating pb free



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- \* Rating at 25 ambient temperature unless otherwise specified
- \* Single phase, half wave. 60Hz, resistive or inductive load.
- \* For capacitive load derate current by 20 %

Characteristic	Symbol	RL201M -T52	RL202M -T52	RL203M -T52	RL204M -T52	RL205M -T52	RL206M -T52	RL207M -T52	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectifier Forward Current Per Leg $T_C=125$	$I_{F(AV)}$	2.0							A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	70							A
Maximum Instantaneous Forward Voltage ( $I_F=3.0$ Amp $T_C=25$ )	$V_F$	1.1							V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C=25$ ) (Rated DC Voltage, $T_C=100$ )	$I_R$	5.0 50							$\mu$ A
Maximum Full Load Reverse Current, full Cycle average 0.375"(9.5mm) lead length at $T_L=75^\circ$ C	$I_R$	30							$\mu$ A
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	$C_j$	20							pF
Typical Thermal Resistance	$R_{\theta JA}$	40							/W
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +175							

# RL201M-T52 thru RL207M-T52

FIG-1 FORWARD CURRENT DERATING CURVE

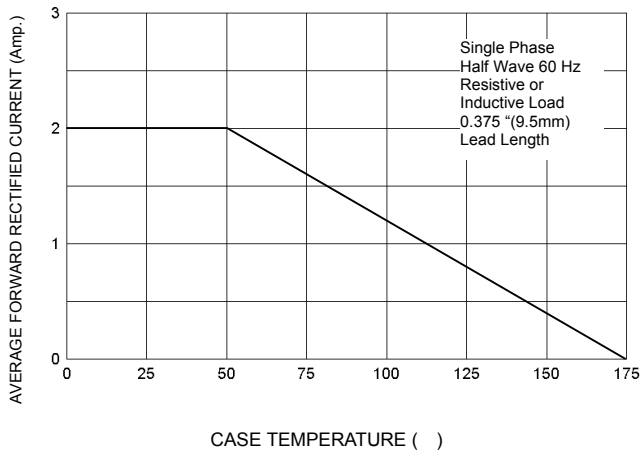


FIG-2 TYPICAL FORWARD CHARACTERISTICS

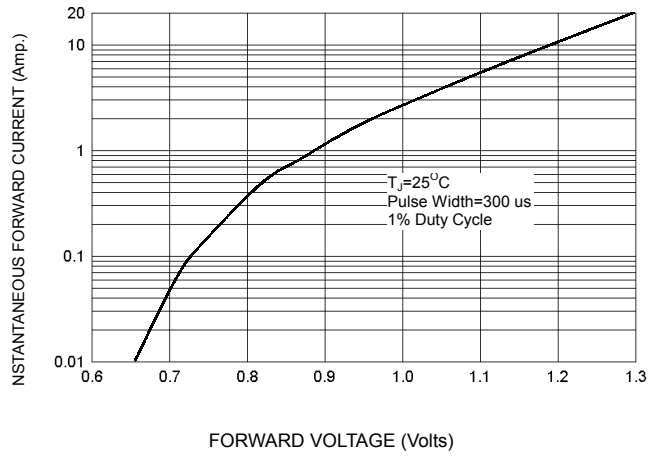


FIG-3 TYPICAL REVERSE CHARACTERISTICS

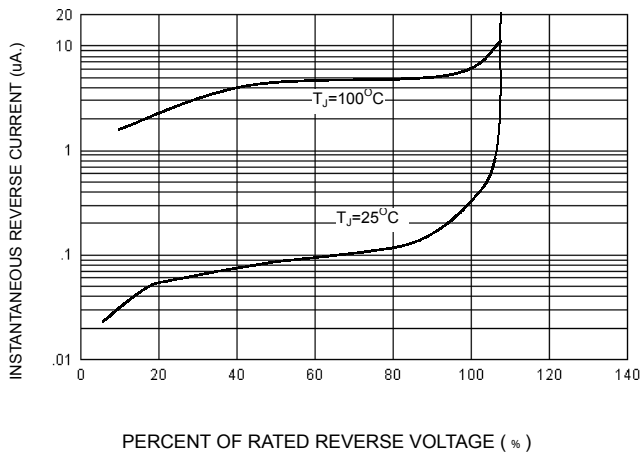


FIG-4 TYPICAL JUNCTION CAPACITANCE

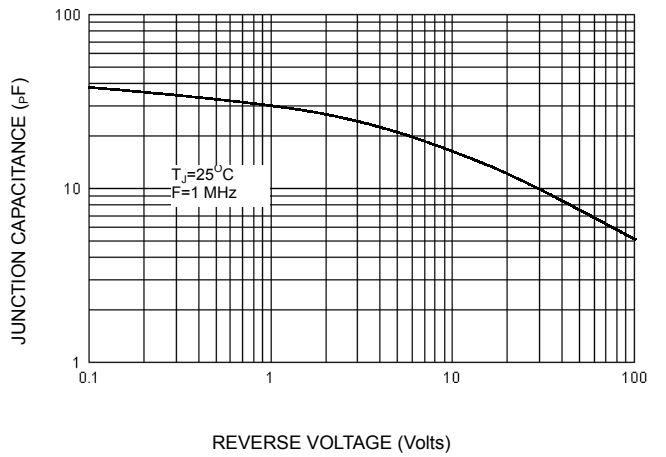
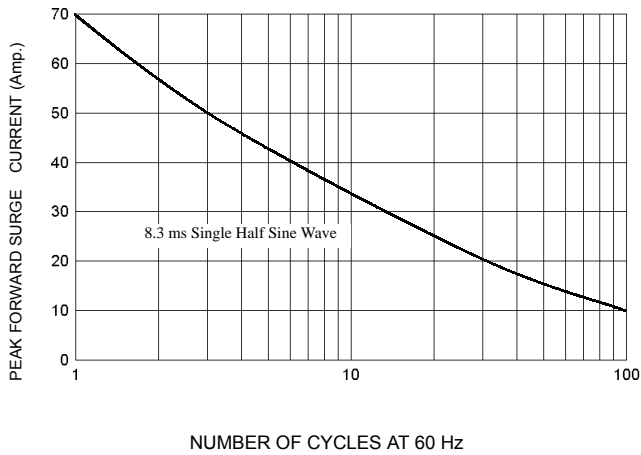


FIG-5 PEAK FORWARD SURGE CURRENT



# RL201M-T52 Thru RL207M-T52

## Taping Specifications

Description	Dimension	Case Style	Specification(mm)
Component Pitch	A	DO-15, DO-35, DO-41, DO-7, A-405, R-3, R-1	5.0±0.5
		5KP, DO-201AD, R-6	10.0±0.5
Inside Tape Spacing	B	All	50±0.1
Lead To Lead Eccentricity	[C <sub>1</sub> - C <sub>2</sub> ]	All	1.0 Max.
Lead Extension	D	All	0.5 Max.
Lead Bending	E	All	1.2 Max.
Cumulative Pitch	G	All	1.5 per 10 pitch
Exposed Adhesive	H	All	0.8 Max.
Tape Width	J	All	6.0±0.4
Tape Leader	Beginning and end of reel or ammo pack		300.0 Min.
Empty Spaces	Consecutive missing components not allowed		<0.1%
Polarity Marking	All polarized components shall be oriented in the same direction. The cathode tape shall be colored and the anode tape shall be white or light beige.		

Dimensions apply to both sides of the reel

