

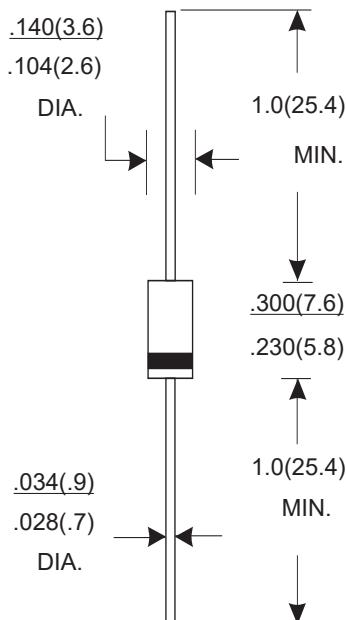
DO-15 PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- 1.5 ampere operation at $T_L=75^\circ\text{C}$ with no thermal runaway
- Low reverse leakage
- Low forward voltage drop
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed: $260^\circ\text{C}/10$ seconds at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case: DO-15 molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbols	RL151	RL152	RL153	RL154	RL155	RL156	RL157	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.5						Amps	
Peak Forward Surge Current(8.3ms)half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0						Amps	
Maximum Instantaneous Forward Voltage at 1.5 A	V_F	1.1						Volts	
Maximum Reverse current at rated DC Blocking Voltage	I_R	5.0						A	
		500.0							
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	50.0						$^\circ\text{C/W}$	
Typical Junction Capacitance(Note 1)	C_J	20.0						PF	
Operating and Storage Temperature Range	T_J	-55 to +175						$^\circ\text{C}$	
	T_{STG}								

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient.375"(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

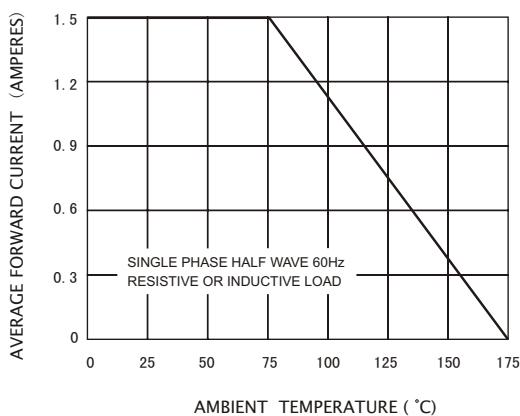


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

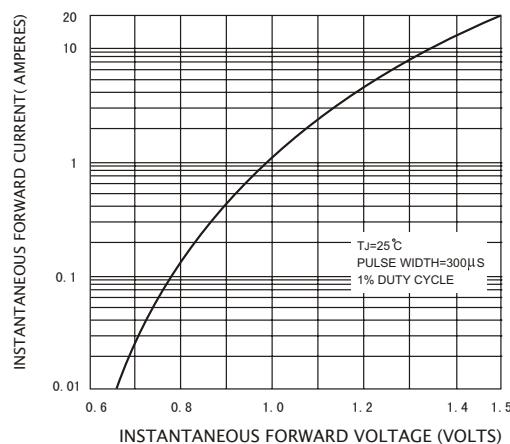


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

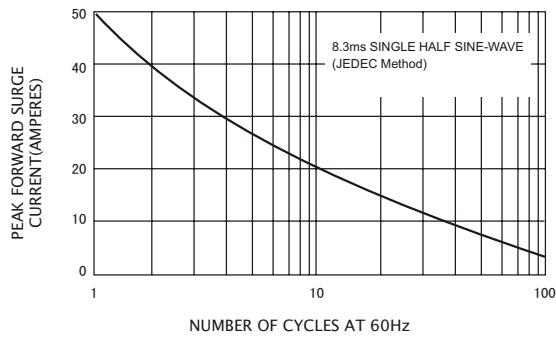


FIG.4-TYPICAL REVERSE CHARACTERISTICS

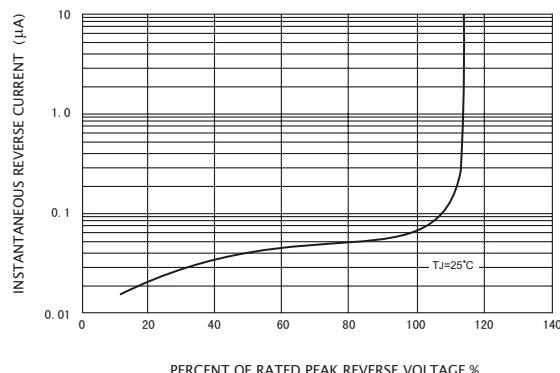


FIG.5-TYPICAL JUNCTION CAPACITANCE

