

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 1.5 A

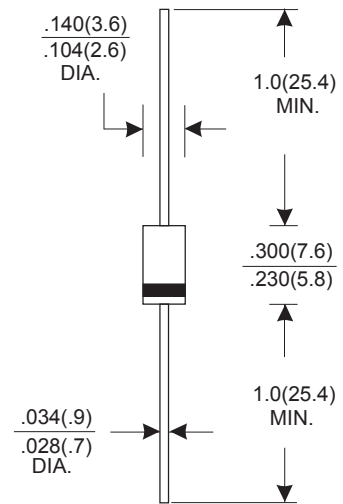
FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High surge current capability
- 1.5 ampere operation at TL=75 °C with no thermal runaway
- Low reverse leakage
- Low forward voltage drop
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

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

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

	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 TA=75°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	$T_A=25\text{ C}$	5.0							A
	$T_A=100\text{ C}$	500.0							
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	50.0							°C/W
Typical Junction Capacitance(Note 1)	C_J	20.0							PF
Operating and Storage Temperature Range	T_J	-65 to +175							°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

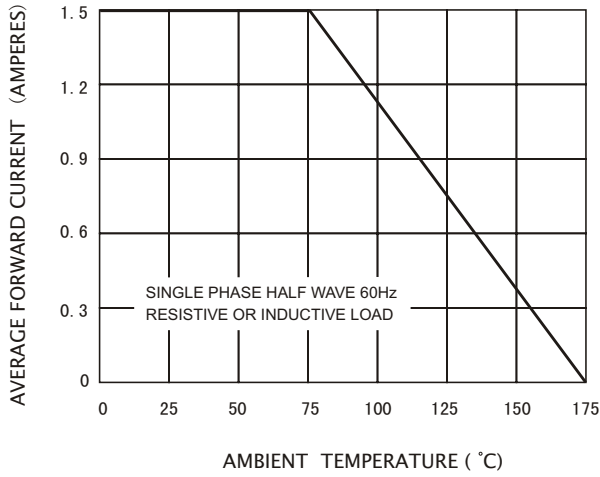


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

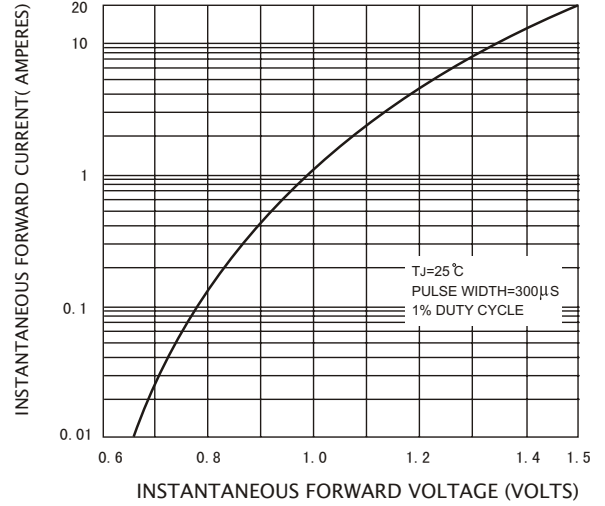


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

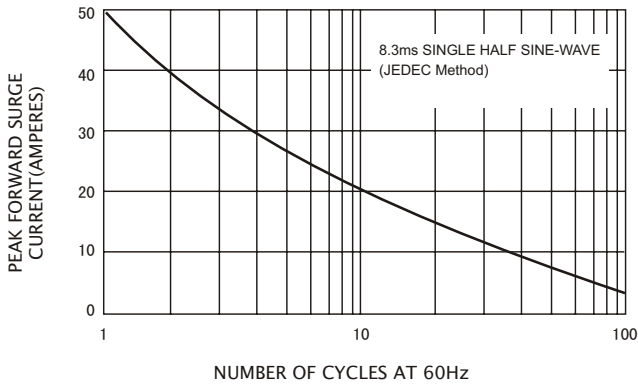


FIG.4-TYPICAL REVERSE CHARACTERISTICS

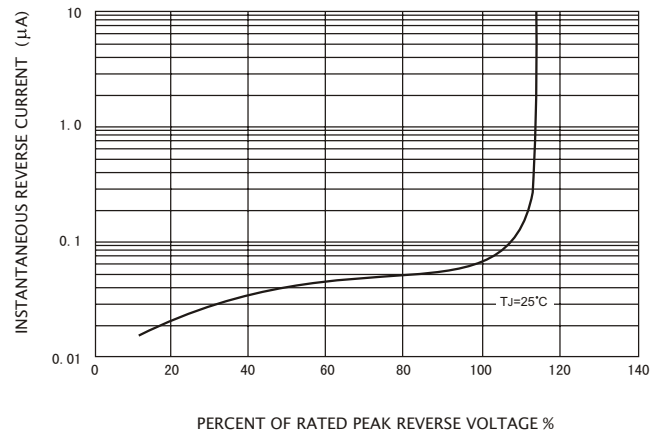


FIG.5-TYPICAL JUNCTION CAPACITANCE

