

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 1.0 A

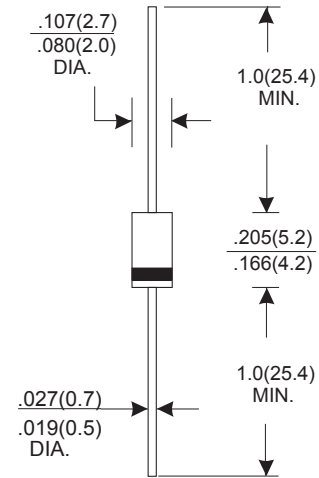
FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High reliability
- 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-41 molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any

DO-41



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	RL101	RL102	RL103	RL104	RL105	RL106	RL107	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	300	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	300	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current(8.3ms)half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 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	15.0							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

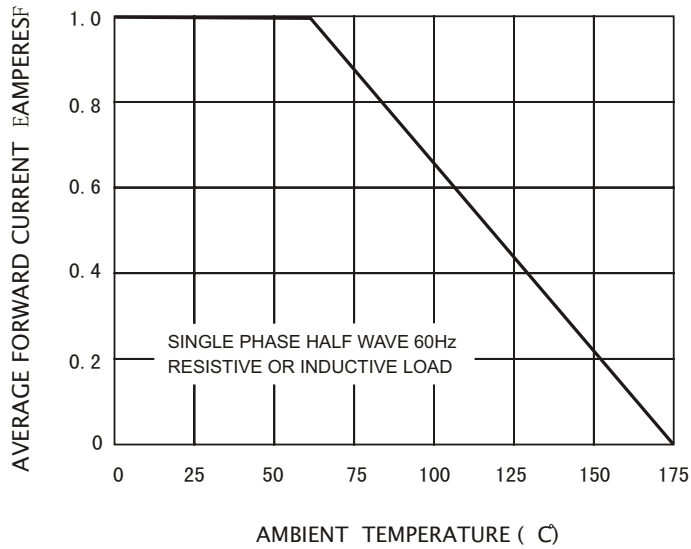


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

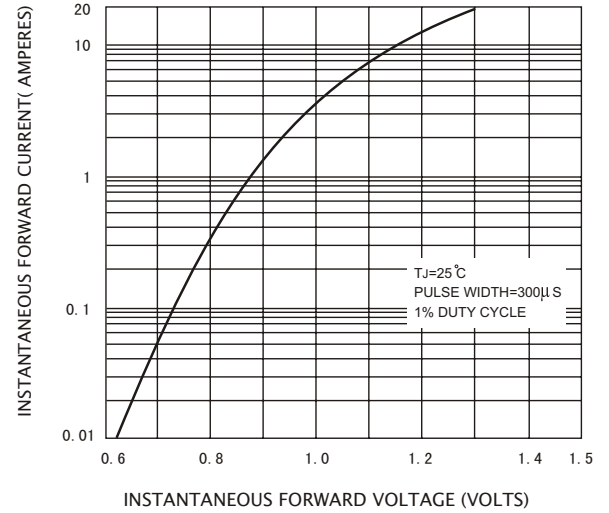


FIG.3 - MAXIMUM PEAK NON-REPETTIVE FORWARD SURGE CURRENT

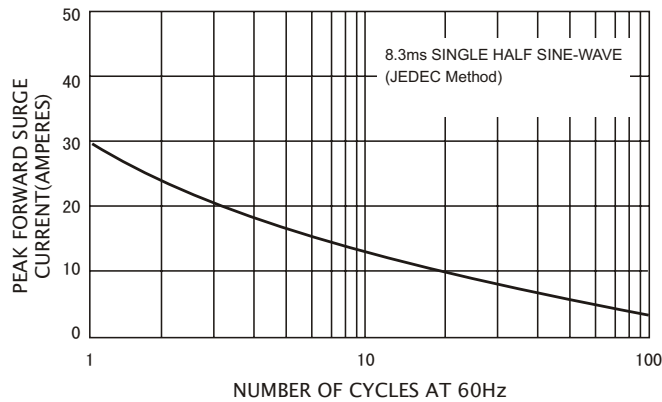


FIG.4-TYPICAL REVERSE CHARACTERISTICS

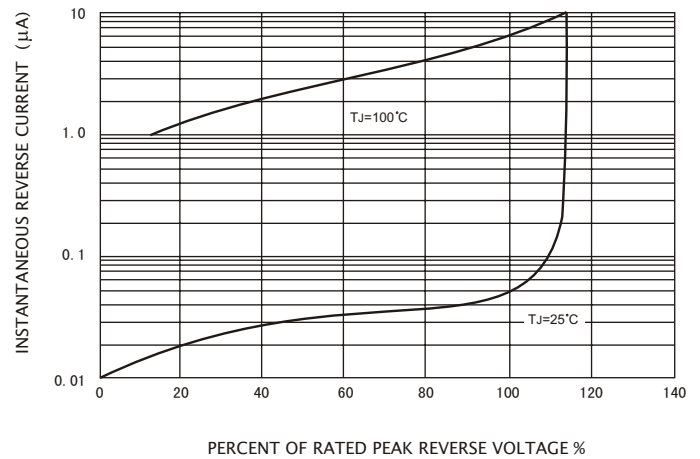


FIG.5-TYPICAL JUNCTION CAPACITANCE

