

Plastic Silicon Rectifiers

Reverse Voltage 50 to 1000 Volts, Forward Current 2.0 Amperes

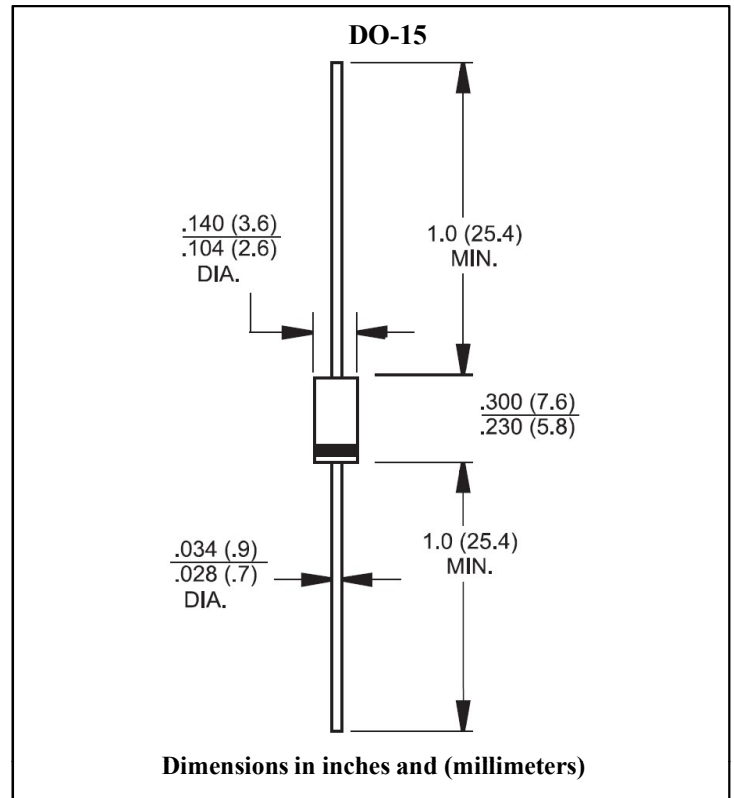
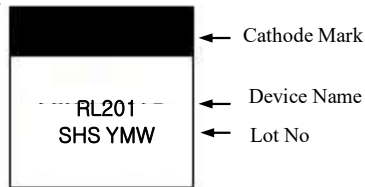
Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-O

Mechanical Data

- Case : Molded plastic
- Epoxy : UL 94V-O rate flame retardant
- Terminals : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375",(9.5mm) lead lengths at 5lbs.,(2.3kg) tension
- Weight : 0.4 gram

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
Single phase half wave 60 HZ, resistive or inductive load
For capacitive load, derate current by 20%

Parameter	Symbol	RL201	RL202	RL203	RL204	RL205	RL206	RL207	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length	$I_F(AV)$	2.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	70							A	
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.1							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0							uA	Ta=25°C
		50							uA	Ta=100°C
Typical Junction Capacitance	C_J	20							pF	Note 1
Typical Thermal Resistance	$R_{th(j-a)}$	40							°C /W	Note 2
Operation Junction Temperature Range	T_J	-55 to +150							°C	
Storage Temperature Range	T_{STG}	-55 to +150							°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Thermal resistance from junction to ambient.



Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

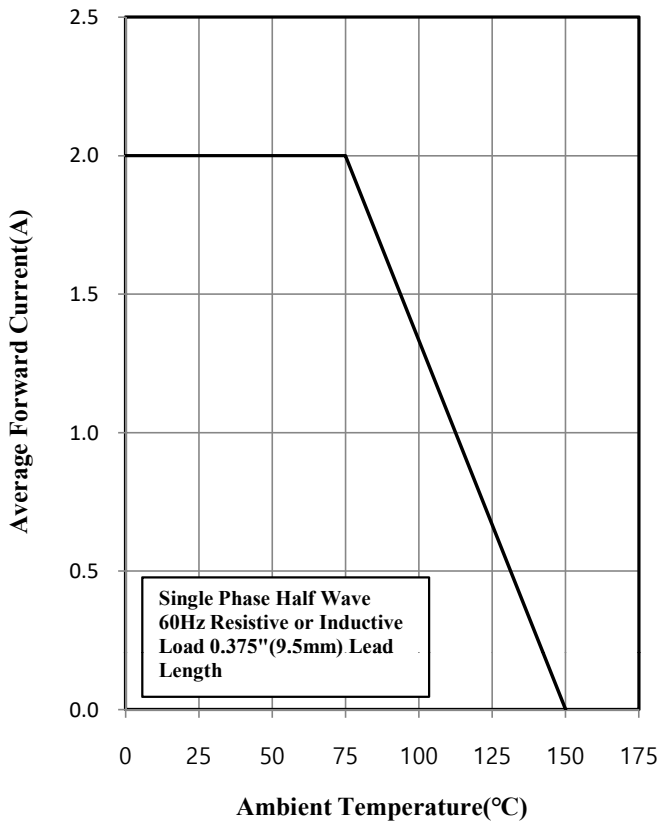


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

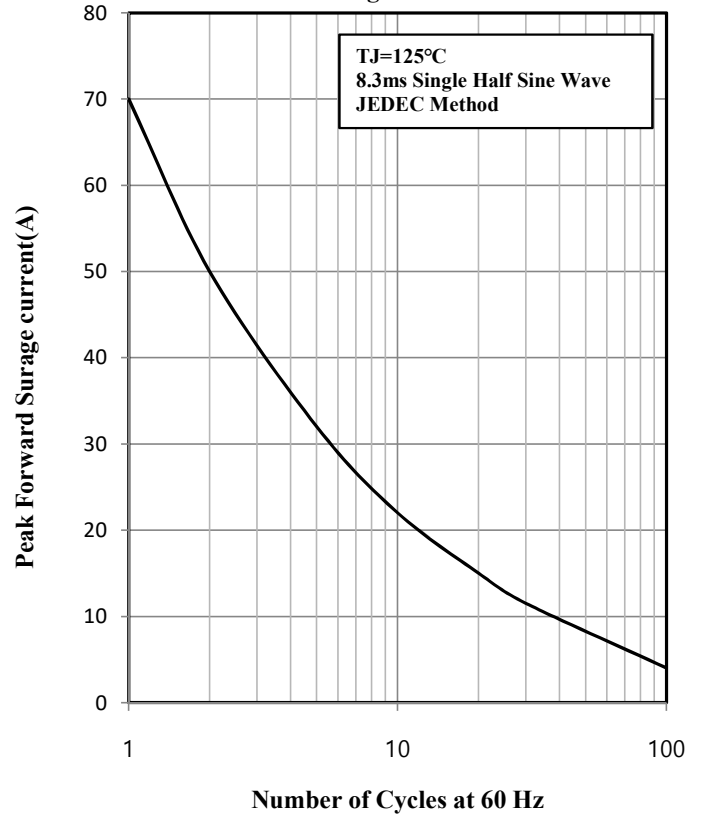


Fig.3 Typical Instantaneous Forward Characteristics

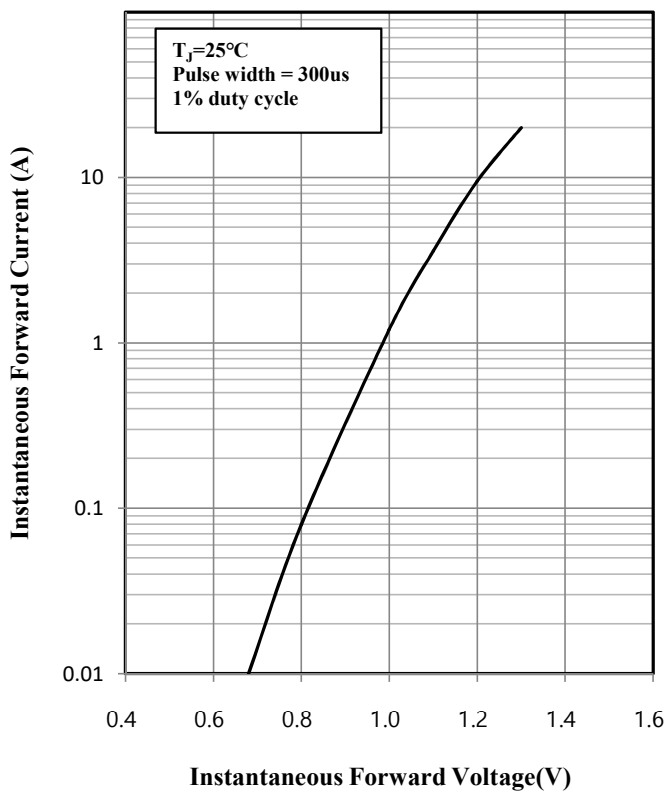


Fig.4 Typical Junction Capacitance

