



RL5400 THRU RL5408

GENERAL PURPOSE SILICON RECTIFIER

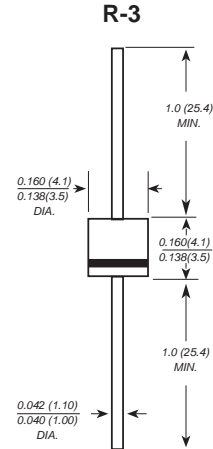
Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0Amperes

FEATURES

The plastic package carries Underwriters Laboratory
Flammability Classification 94V-0
Construction utilizes void-free
molded plastic technique
Low reverse leakage
High forward surge current capability
High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC R-3 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750,
Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.022 ounce, 0.625 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	RL 5400	RL 5401	RL 5402	RL 5404	RL 5406	RL 5407	RL 5408	UNITS
Maximum repetitive 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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0							Amps
Maximum instantaneous forward voltage at 2.5A	V_F	1.2							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical junction capacitance (NOTE 1)	C_J	50.0				35.0			pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	15.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +155							$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



RATINGS AND CHARACTERISTIC CURVES RL5400 THRU RL5408

FIG. 1 – FORWARD CURRENT DERATING CURVE

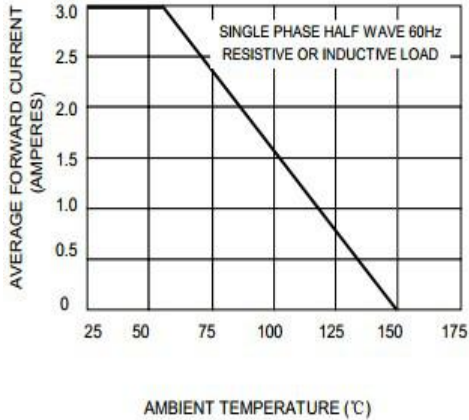


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

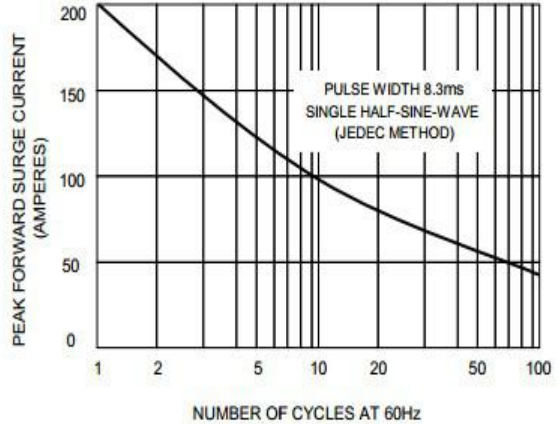


FIG.3 – TYPICAL JUNCTION CAPACITANCE

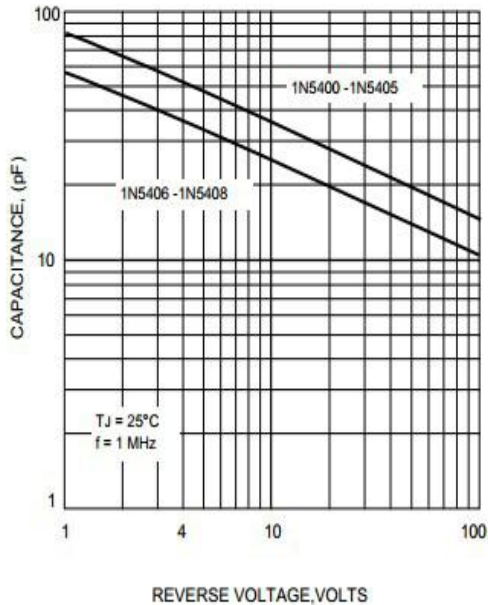


FIG.4-TYPICAL FORWARD CHARACTERISTICS

