

RL201 ~ RL207&2A01~2A07 2.0Amp General Purpose Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

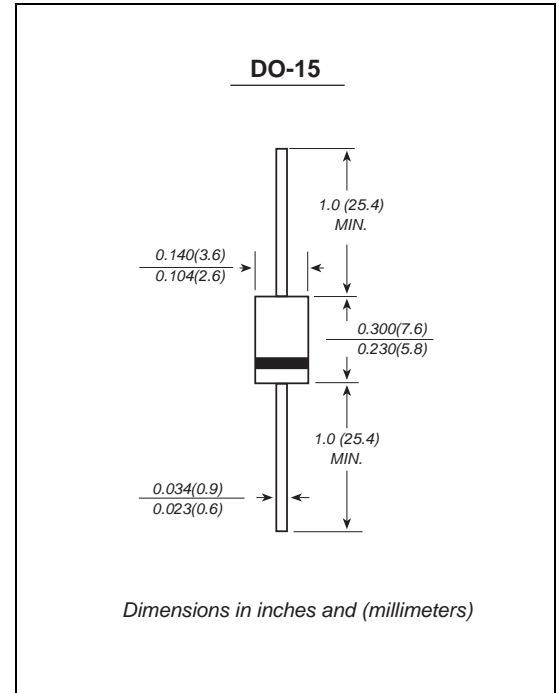
Case: JEDEC DO-15 molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.014 ounce, 0.4 grams



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	RL201 2A01	RL202 2A02	RL203 2A03	RL204 2A04	RL205 2A05	RL206 2A06	RL207 2A07	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 $T_A = 75^\circ C$	$I_{(AV)}$	2.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60.0							Amps
Maximum instantaneous forward voltage at 2.0A	V_F	1.0							Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	I_R	5.0 50.0							μA
Typical junction capacitance (Note 1)	C_J	20							pF
Typical thermal resistance (Note 2)	R_{qJA}	50.0							$^\circ C$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +155							$^\circ C/W$

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

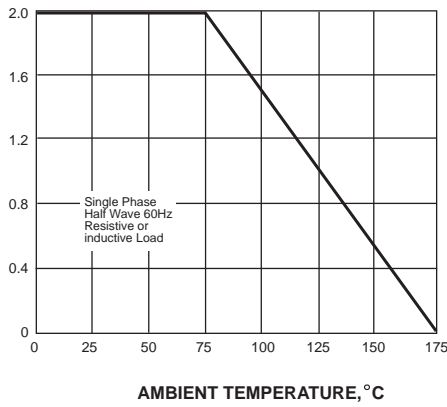
2. Thermal resistance from junction to ambient at 9.5mm lead length, P.C.B. mounted

Ratings And Characteristic Curves

RL201 THRU RL207 AND 2A01 THUR 2A07

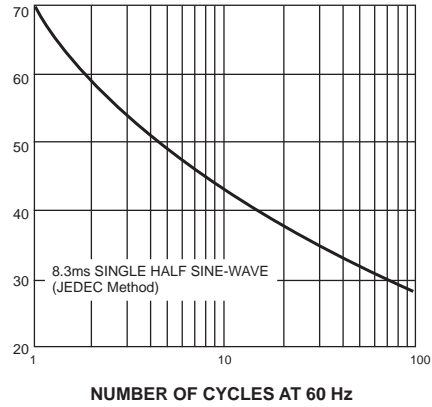
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



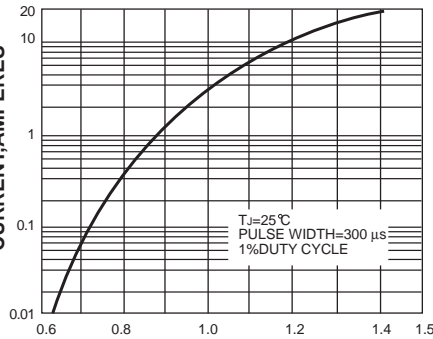
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

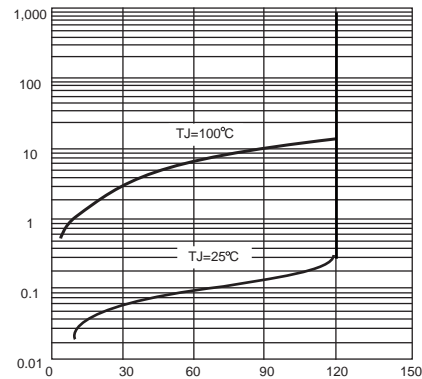
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE,
VOLTS

INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

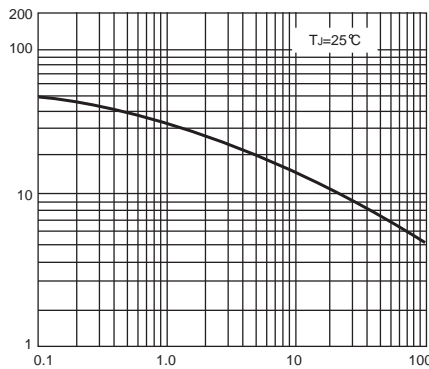
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE, %

JUNCTION CAPACITANCE, pF

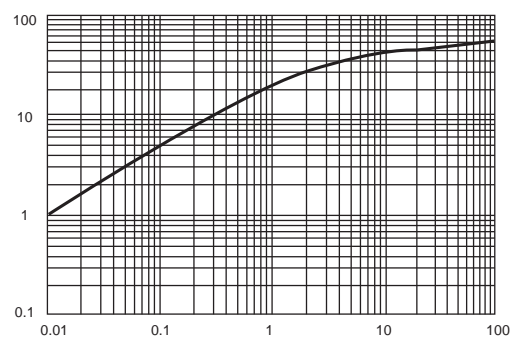
FIG. 5-TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS

TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t, PULSE DURATION, sec.