

GENERAL PURPOSE PLASTIC RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

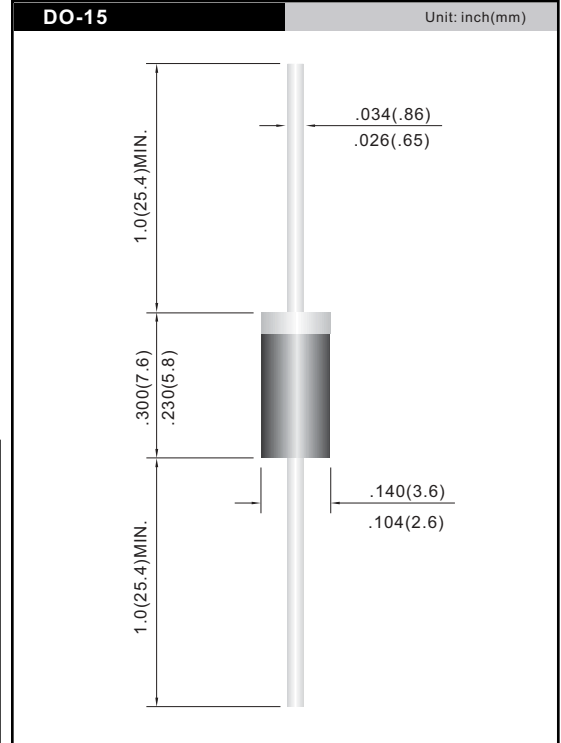
Forward Current – 2.0 Amperes

Features

- High surge current capability
- 2.0 ampere operation at $T_A = 75^\circ\text{C}$ with no thermal runaway
- Low reverse leakage
- Construction utilizes void-free molded plastic technique.
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs (2.3kg) tension

Mechanical Data

- **Case:** Molded plastic, DO-15.
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any.



Absolute Maximum Ratings and Characteristics @ 25 °C unless otherwise specified.

	Symbols	RL201 G	RL202 G	RL203 G	RL204 G	RL205 G	RL206 G	RL207 G	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 current at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	2							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	70							Amps
Maximum instantaneous forward voltage at $I_{FM} = 2.0\text{A}$, $T_A = 25^\circ\text{C}$ (Note 2)	V_F	1							Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	5 50							μA
Typical thermal resistance	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Typical junction capacitance (Note 1)	C_J	20							pF
Operating and storage temperature range	T_J, T_S	-65 to +175							$^\circ\text{C}$

Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4volts
- (2) Pulse test: pulse width 300 uSec, Duty cycle 1%.

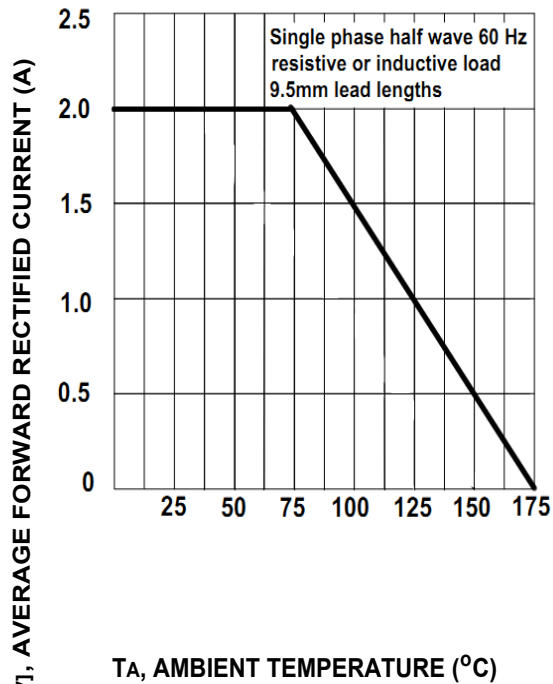


Fig.1 Forward Current Derating Curve

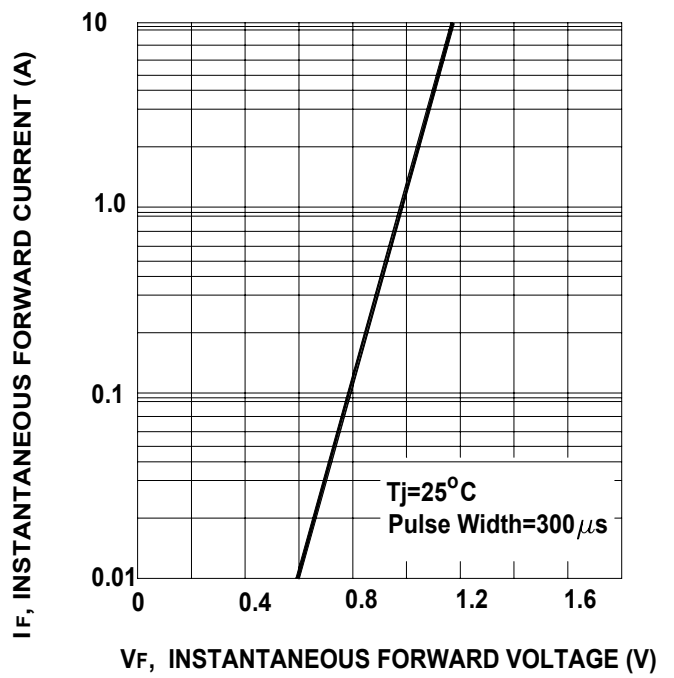


Fig.2 Typical Forward Characteristics

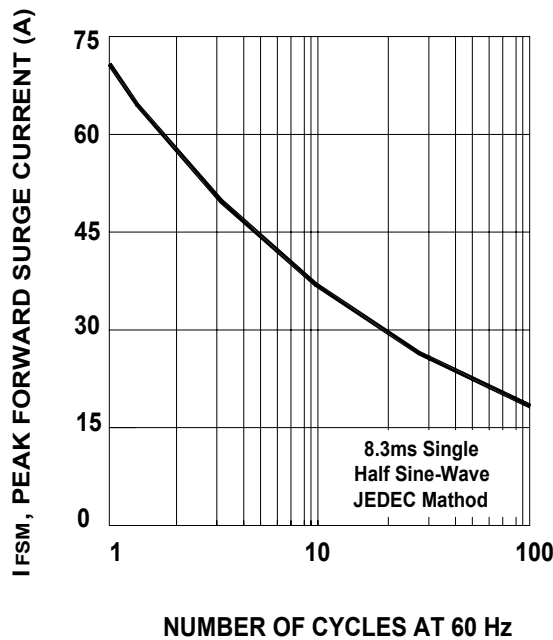


Fig.3 Max Non-Repetitive Peak Forward Surge Current

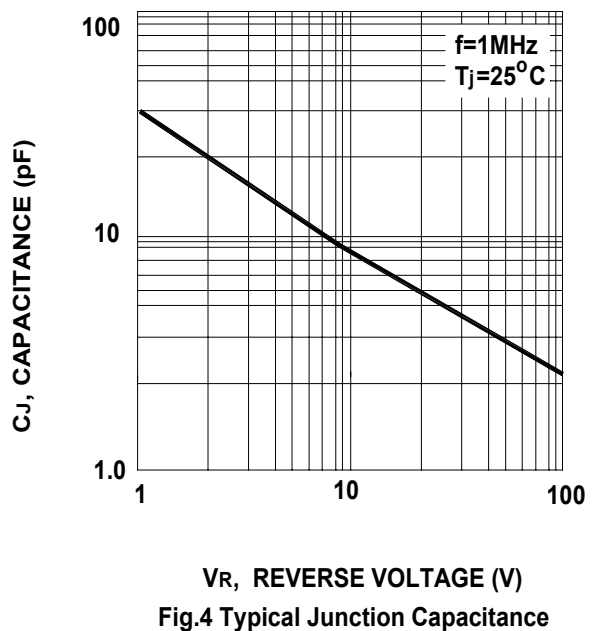


Fig.4 Typical Junction Capacitance