

REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 2.0 AMPERE

FEATURES

- High current capability
- High reliability
- Low forward voltage drop
- Low leakage
- High switching capability

MECHANICAL DATA

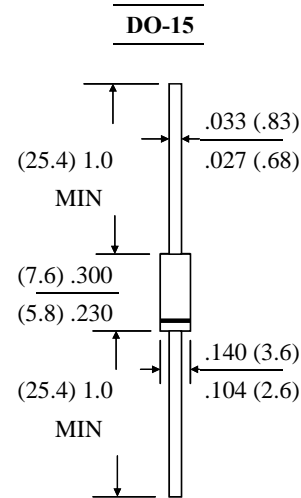
Case: Molded plastic, DO-15

Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable per MIL-STD-202 method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any



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, derate current by 20%.

	Symbols	FR201	FR202	FR203	FR204	FR205	FR206	FR207	Units
Maximum Recurrent 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 .375"(9.5mm) Lead Length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amp
Maximum Forward Voltage at 2.0A DC and 25°C	V_F	1.3							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R					5.0			uAmp
Typical Junction Capacitance (Note 1)	C_J					15			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$					50			°C/W
Maximum Reverse Recovery Time (Note 3)	T_{RR}	150				250	500		nS
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted.

3- Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{RR}=.25A$.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-MAXIMUM FORWARD CURRENT DERATING CURVE

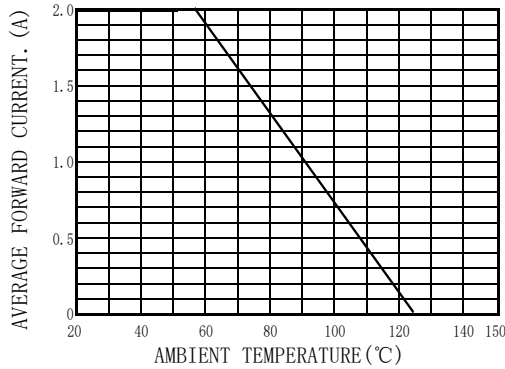


Fig. 2- Peak Forward Surge Current

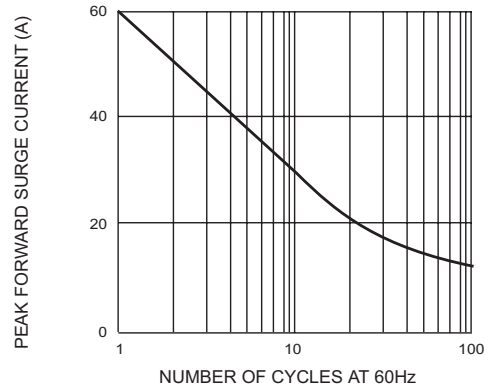


FIG.3- TYPICAL FORWARD CHARACTERISTICS

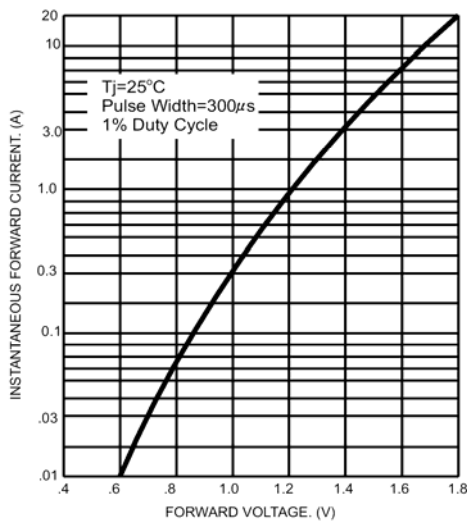


FIG.4- TYPICAL JUNCTION CAPACITANCE

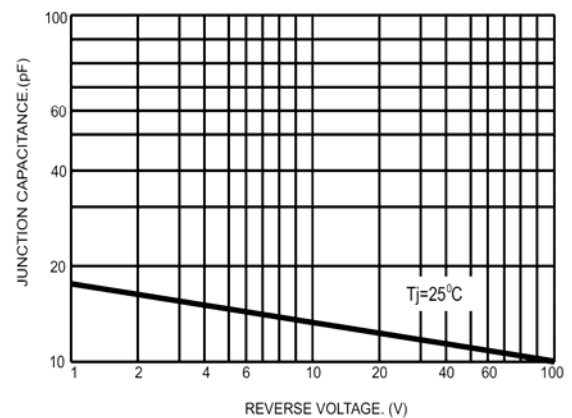


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

