FR201 THRU FR207

2.0 AMP. FAST RECOVERY RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
2.0 Amperes

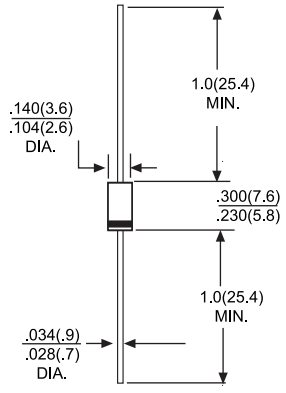
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Cases:Molded plastic
- Epoxy:UL 94V-0 rate flame retardant
- Lead:Axial leads,solderable per MIL-STD-202,Method 208 guaranteed
- Polarity:Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs.,(2.3kg) tension
- Weight:0.40 gram

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number		FR201	FR202	FR203	FR204	FR205	FR206	FR207	UNITS
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 .375"(9.5mm) Lead Length @T_A = 55°C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.2							V
Maximun DC Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_R	5.0 100							uA uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	150				250	500		nS
Typical Junction Capacitance (Note 2)	C_J	30							pF
Operating Temperature Range	T_J	-55 to+125							°C
Storage Temperature Range	T_{STG}	-55 to+150							°C

NOTES: 1. Reverse Recovery Test Conditions: I_F=0.5A,I_R=1.0A,I_{RR}=0.25A
2.Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATING AND CHARACTERISTIC CURVES
FR201 THRU FR207

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

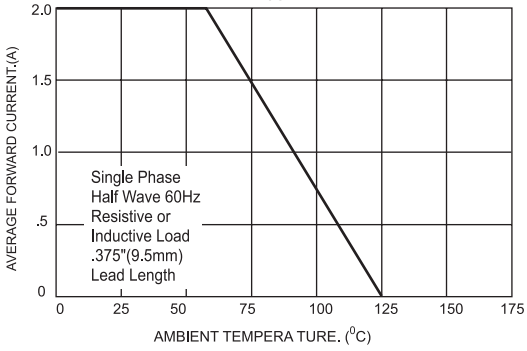


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORDWARD SURGE CURRENT

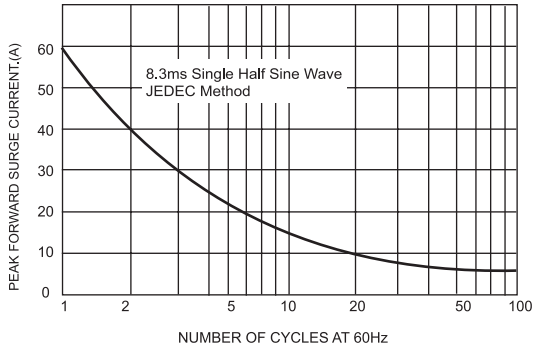


FIG.3-TYPICAL FORWARD CHARACTERISTICS

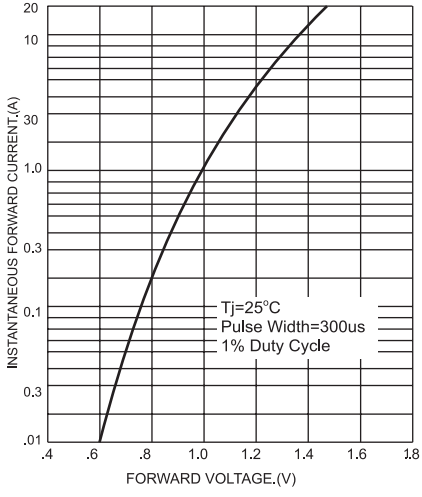


FIG.4- TYPICAL JUNCTION CAPACITANCE

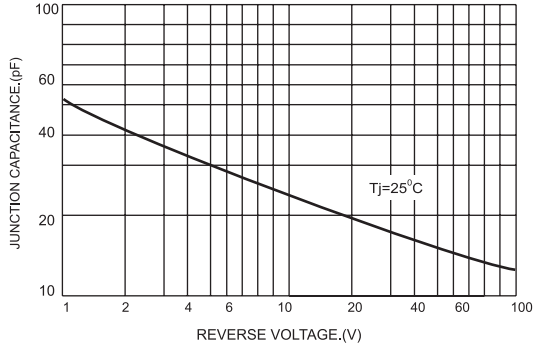


FIG.5- REVERSE RECOVER TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM