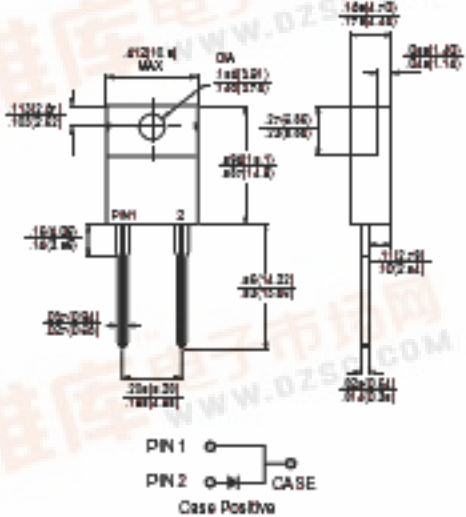


	FRA1001G THRU FRA1007G 10 AMPS. Glass Passivated Fast Recovery Rectifiers																	
					Voltage Range 50 to 1000 Volts Current 10 Amperes													
Features - Low forward voltage drop - High current capability - High reliability - High surge current capability Mechanical Data - Cases: ITO-220AC molded plastic - Epoxy: UL 94V-0 rate flame retardant - Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed - Polarity: As marked - High temperature soldering guaranteed: 260°C/10 seconds .16", (4.06mm) from case. - Mounting position: Any - Weight: 2.24 grams					TO-220A  Dimensions in inches and (millimeters)													
					Maximum Ratings and Electrical Characteristics													
					Rating at 25°C ambient temperature unless otherwise specified.													
					Single phase, half wave, 60 Hz, resistive or inductive load.													
					For capacitive load, derate current by 20%													
Type Number		Symbol	FRA 1001G	FRA 1002G	FRA 1003G	FRA 1004G	FRA 1005G	FRA 1006G	FRA 1007G	Units								
Maximum Recurrent 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 @ T _C = 100°C		I _(AV)	10							A								
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	150							A								
Maximum Instantaneous Forward Voltage @ 10A		V _F	1.3							V								
Maximum DC Reverse Current @ T _C =25°C at Rated DC Blocking Voltage @ T _C =125°C		I _R	5.0 100							uA uA								
Maximum Reverse Recovery Time (Note 2)		T _{rr}	150				250		500		nS							
Typical Junction Capacitance (Note 1) T _J =25°C		C _j	100							pF								
Typical Thermal Resistance (Note 3)		R _{θJC}	3.0							°C/W								
Operating and Storage Temperature Range		T _J , T _{stg}	-65 to +150							°C								

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

3. Thermal Resistance from Junction to Case, Mount on Heatsink size 2" x 3" x 0.25" Al-Plate

RATINGS AND CHARACTERISTIC CURVES (FRA1001G THRU FRA1007G)

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

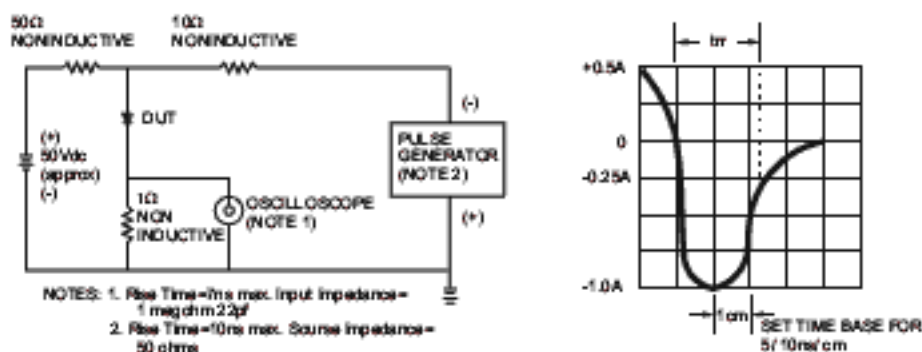


FIG. 2- MAXIMUM FORWARD CURRENT DERATING CURVE

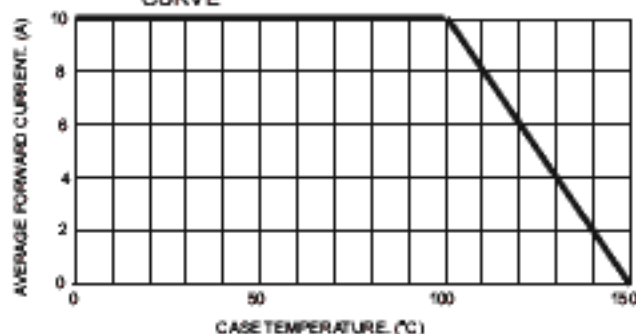


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

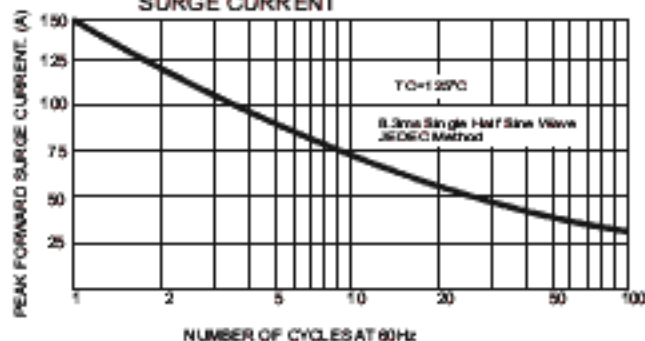


FIG. 4- TYPICAL JUNCTION CAPACITANCE

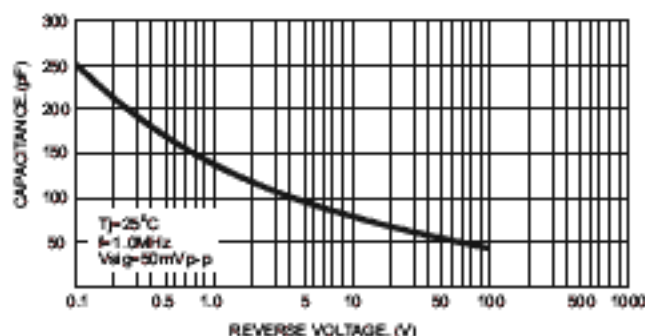


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

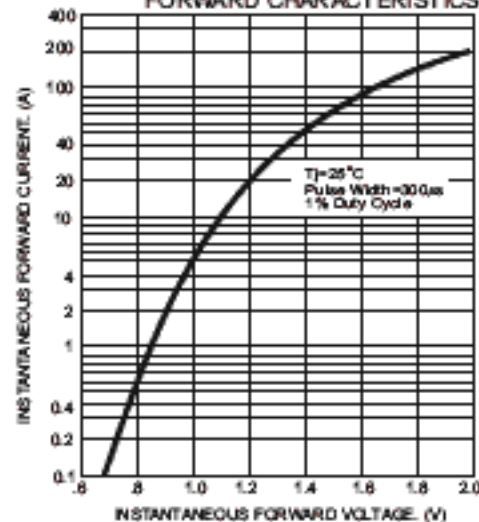


FIG. 6- TYPICAL REVERSE CHARACTERISTICS

