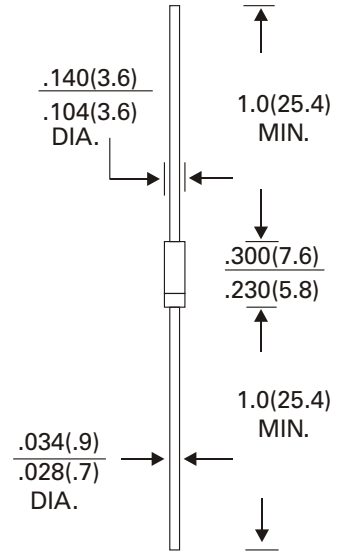
FR201 thru FR207

FAST RECOVERY RECTIFIERS

CHENG-YI ELECTRONIC

VOLTAGE 50 TO 1000 Volts
CURRENT 2.0 Amperes

DO-15



Dimensions in inches and (millimeters)

FEATURES

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

MECHANICAL DATA

- Case:Molded plastic
- Epoxy:UL 94V-0 rate flame retardant.
- Lead:Axial leads ,solderable per MIL-STD-202, Method 208 quaranteed.
- Polarity:Color Band denotes cathode end
- Mounting position:Any
- Weight:0.4 grams

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%.

	FR201	FR202	FR203	FR204	FR205	FR206	FR207	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" , (9.5mm) Lead Length at @ T_A=55°C	2.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	60							A
Maximum Instantaneous Forward Voltage at 2.0A	1.3							V
Maximum DC Reverse Current , @ T_A=25°C	5.0							μA
at Rated DC Blocking Voltage @ T_A=100°C	100							μA
Maximum Reverse Recovery Time (Note 1)	150				250	500		nS
Typical Junction Capacitance (Note 2)	30							pF
Operating and Storage Temperature Range T_J, T_{STG}	-65 to +125 / -65 to +150							°C

Notes : 1. Reverse Recovery Test Conditions : I_F=0.5A, I_R=1.0A, Irr=0.25A.
2. Measured at 1MHz and applied reverse voltage of 4.0 VDC.

FR201 thru FR207

FAST RECOVERY RECTIFIERS

CHENG-YI ELECTRONIC

RATING AND CHARACTERISTICS CURVES
FR201 THRU FR207

Fig. 1 - FORWARD CURRENT DERATING CURVE

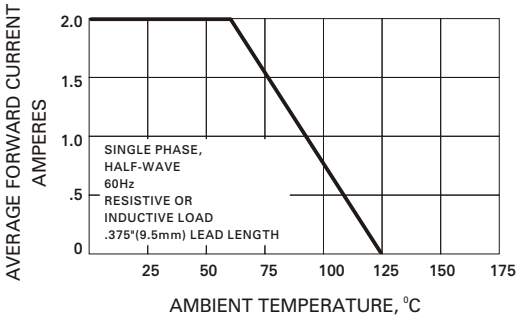


Fig.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

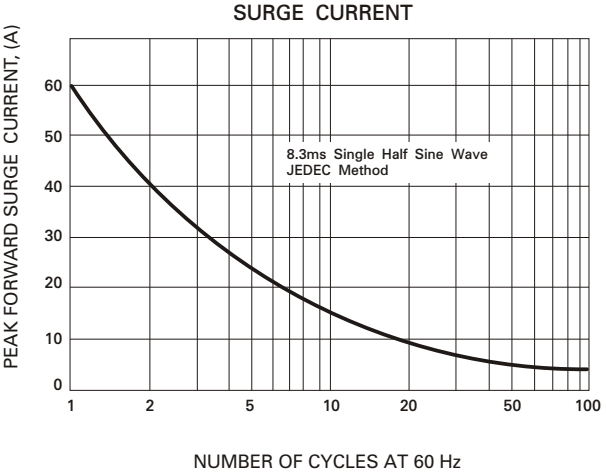


Fig.3 - TYPICAL FORWARD CHARACTERISTICS

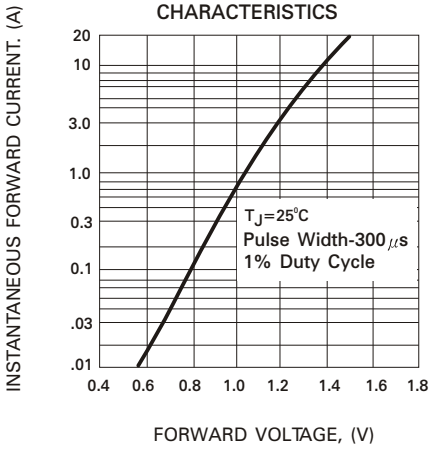


Fig. 4 - TYPICAL JUNCTION CAPACITANCE

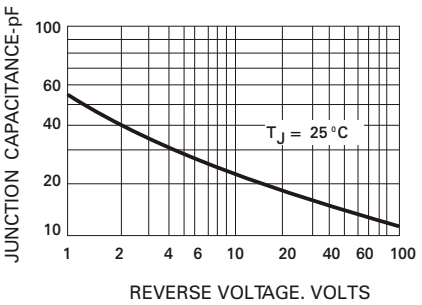
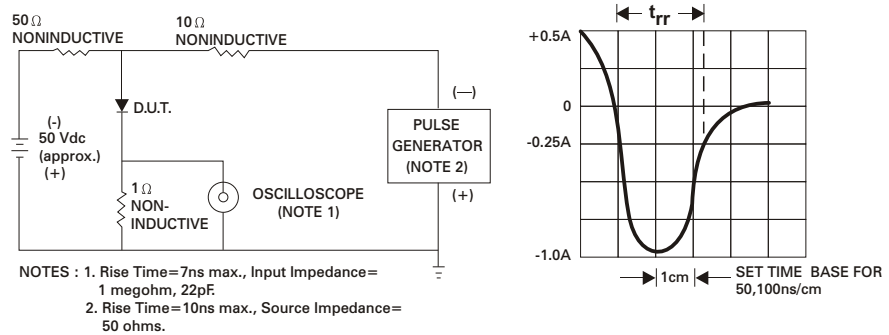


Fig. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES : 1. Rise Time=7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time=10ns max., Source Impedance= 50 ohms.