PINGWEI ENTERPRISE

FR101 THRU FR107

1.0AMP. FAST RECOVERY RECTIFIER

FEATURES

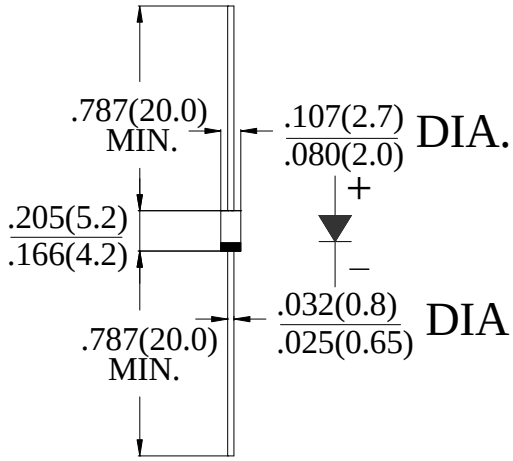
- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- High surge capability
- High reliability
- High temperature soldering guaranteed

260°C /1 0sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: MIL-STD- 202E, Method 208 guaranteed
- Polarity:Color band denotes cathode end
- Mounting position: Any

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

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

Type Number	SYMBOL	FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107	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 Current.375"(9.5mm) lead length @T_a =55°C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous forward Voltage at 1.0A DC	V_F	1.3							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I_R	5.0 100.0							μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150				250	500		nS
Typical Junction Capacitance (Note 2)	C_J	15							pF
Storage Temperature	T_{STG}	-55 to +150							°C
Operation JunctionTemperature	T_J	-55 to +125							°C

Note:

1.Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

2.Measured at 1MHz and applied reverse voltage of 4.0 volts d.c.

RATING AND CHARACTERISTIC CURVES (FR101 THRU FR107)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

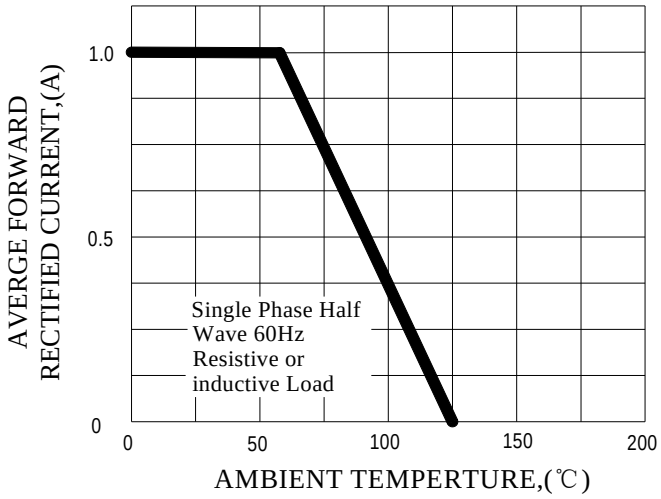


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

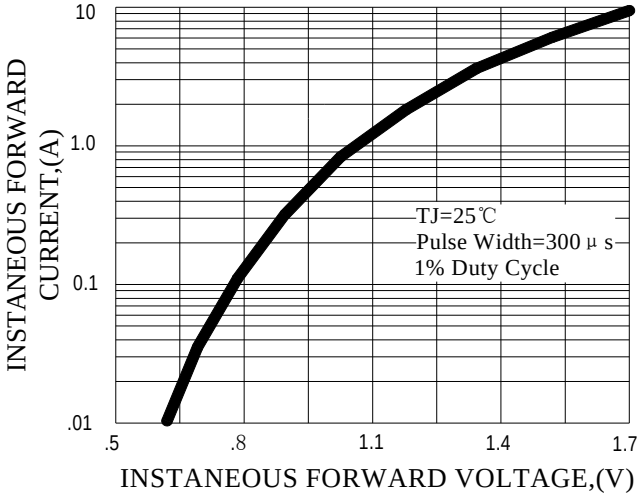


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

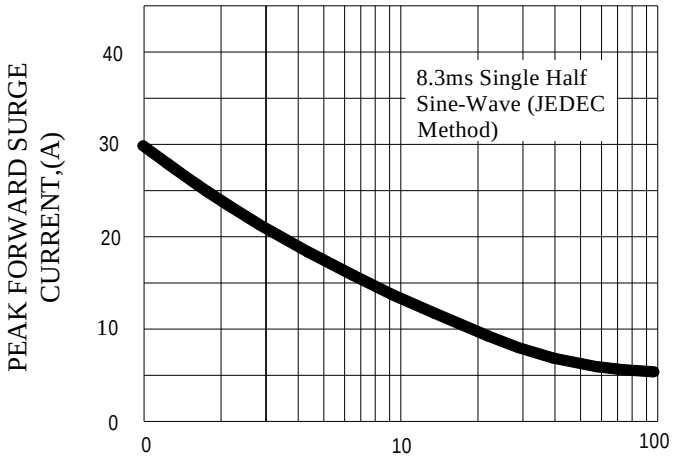


FIG.4-TYPICAL REVERSE CHARACTERISTICS

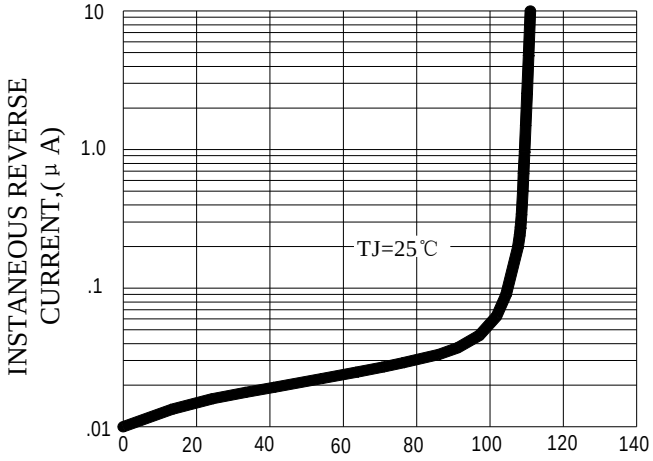
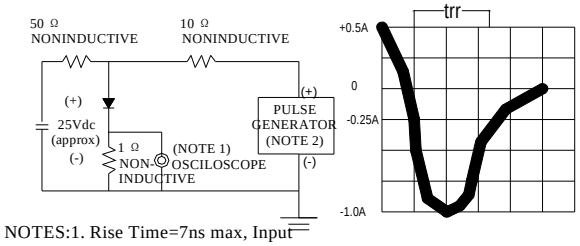


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



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