

FR101~FR107

FAST RECOVERY RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 1 Ampere

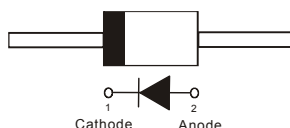
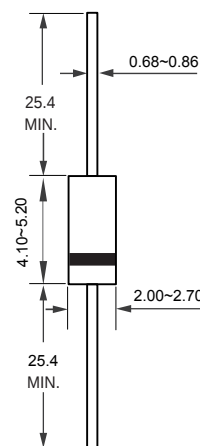
FEATURES

- High current capability.
- Low leakage
- Fast switching for high efficiency.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0

DO-41 Unit:mm



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	FR101	FR102	FR103	FR104	FR105	FR106	FR107	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 Current (see FIG.1)	I _{F(AV)}	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum Forward Voltage at 1A	V _F	1.3							V
Maximum DC Reverse Current at at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	5.0 100							μA
Typical Junction Capacitance	C _J	12							pF
Maximum Reverse Recovery Time	t _{rr}	150				250	500		ns
Typical Thermal Resistance	R _{θJA}	67							°C/W
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C

NOTES:1. Reverse recovery test conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$

2. Measured at 1 MHz and applied reverse voltage of 4 VDC

3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

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RATING AND CHARACTERISTIC CURVES

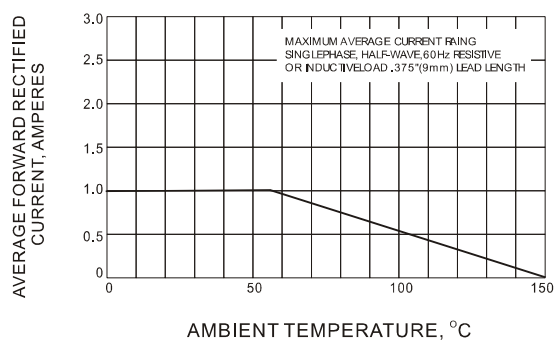


Fig.1 FORWARD CURRENT DERATING CURVE

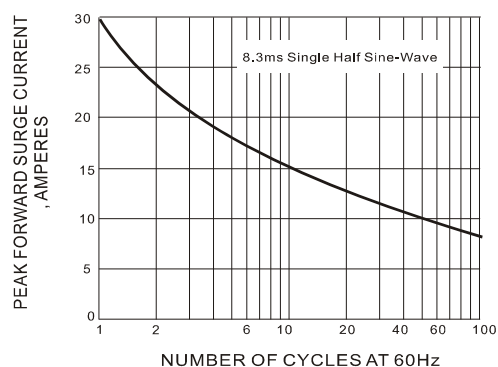


Fig.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

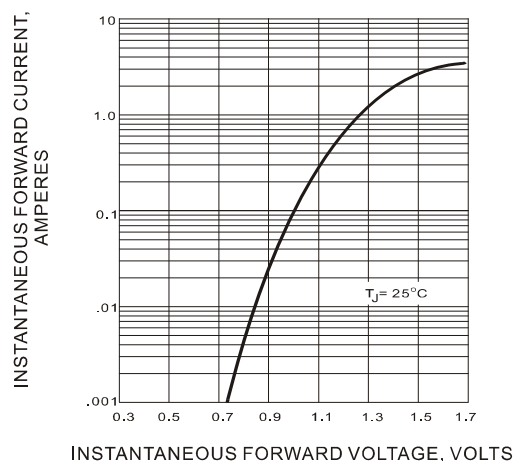


Fig.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

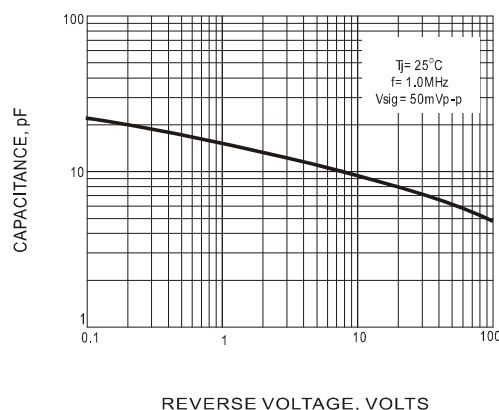


Fig.4 TYPICAL JUNCTION CAPACITANCE

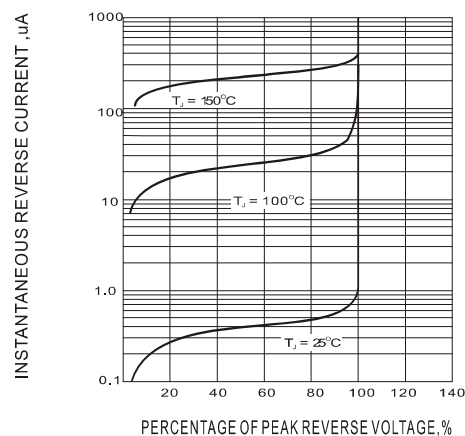


Fig.5 TYPICAL REVERSE CHARACTERISTIC

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Ordering Information

- Packing information

FR101~FR107	Packing Quantity
Tape&Reel	13 Inch; 5kpcs/Reel
Ammo Packing	5kpcs/Ammo Box
Bulk(Tube/Box)	1kpcs/Box