



FR101 thru FR107

FAST RECOVERY RECTIFIERS	REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 1.0 Ampere
<p>FEATURES</p> <ul style="list-style-type: none"> ● Fast switching for high efficiency ● Low cost ● Diffused junction ● Low reverse leakage current ● Low forward voltage drop ● High current capability ● The plastic material carries UL recognition 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: JEDEC DO-41 molded plastic ● Polarity: Color band denotes cathode ● Weight: 0.012 ounces , 0.34 grams ● Mounting position: Any 	<p>DO-41</p> <p>Dimensions in inches and (millimeters)</p>

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%

CHARACTERISTICS	SYMBOL	FR101	FR102	FR103	FR104	FR105	FR106	FR107	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=75 °C	I(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	30							A
Peak Forward Voltage at 1.0A DC	VF	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=100°C	IR	5.0 100							µA
Maximum Reverse Recovery Time (Note 1)	Trr	150			250		500		nS
Typical Junction Capacitance (Note2)	CJ	25			15				pF
Typical Thermal Resistance (Note3)	RθJA	25							°C/W
Operating Temperature Range	TJ	-55 to +125							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES: 1. Measured with IF=0.5A, IR=1A, IRR=0.25A
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
 3. Thermal resistance junction to ambient.

RATING AND CHARACTERISTIC CURVES
FR101 thru FR107



FIG. 1 – FORWARD CURRENT DERATING CURVE

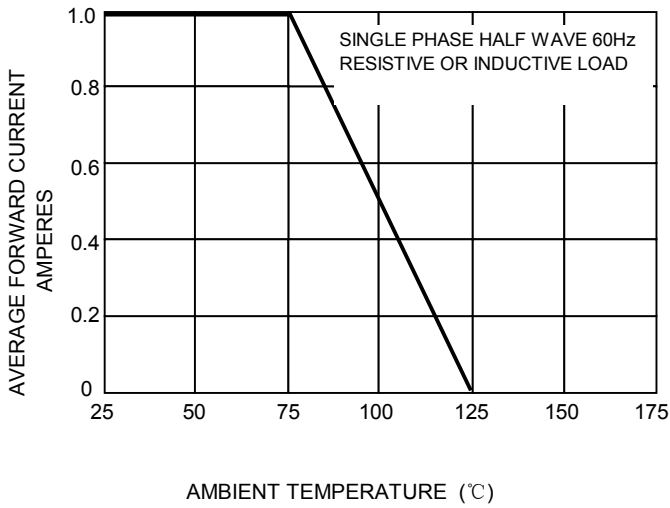


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

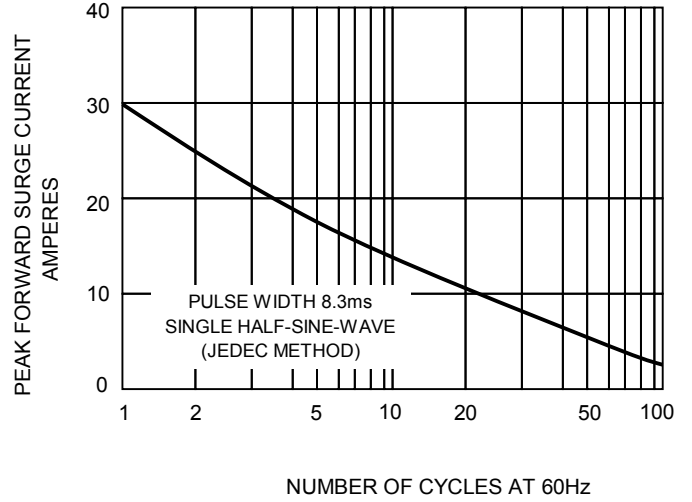


FIG.3 – TYPICAL JUNCTION CAPACITANCE

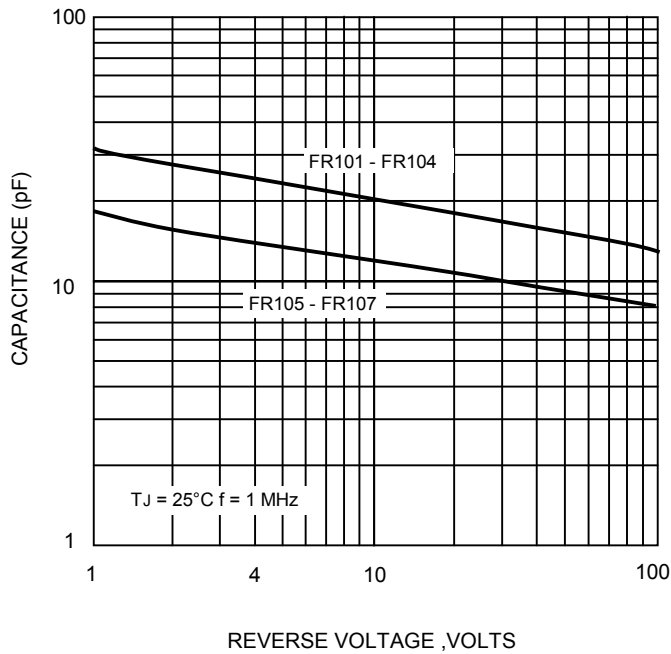


FIG.4-TYPICAL FORWARD CHARACTERISTICS

