



THE DATASHEET OF FR107TA



FR101 THRU FR107
FAST RECOVERY RECTIFIERS
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

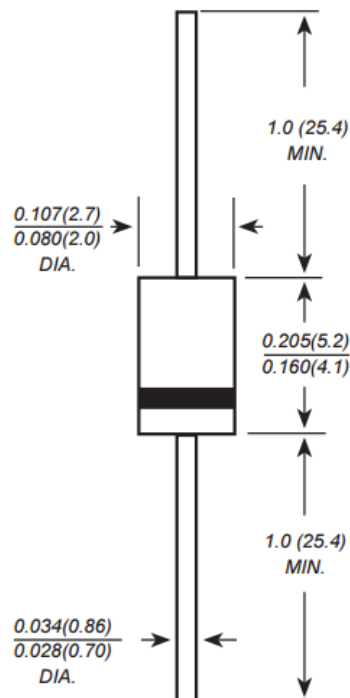
Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260 C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data:

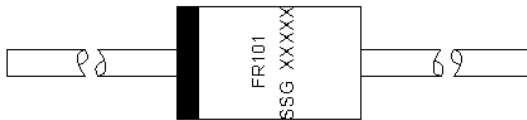
- Case: JEDEC DO-41 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012 ounce, 0.33 grams

Mechanical Dimensions: In Inches/mm



DO-41

MARKING DIAGRAM



Where XXXXX is YYWWL

FR101 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

ORDERING INFORMATION

Device	Suffix	Package	Shipping
FR101-FR107	TR	DO-41 (Pb-Free)	5000pcs / reel
FR101-FR107	TA	DO-41 (Pb-Free)	5000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

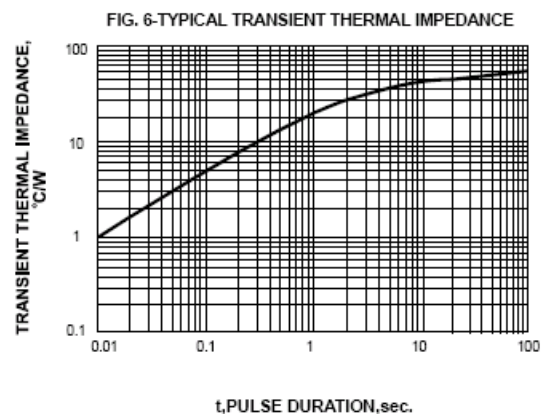
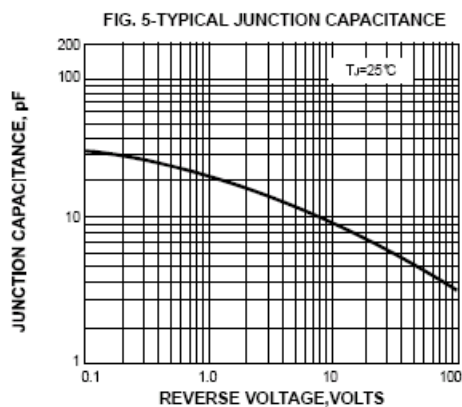
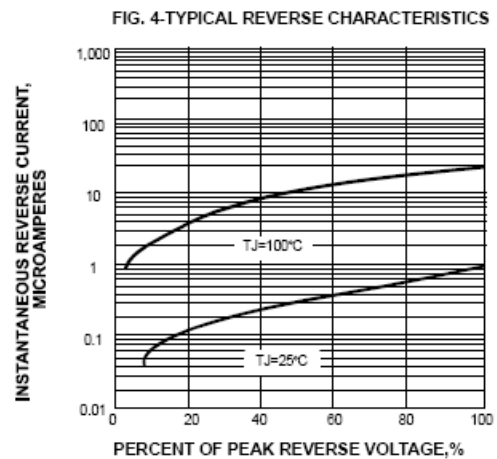
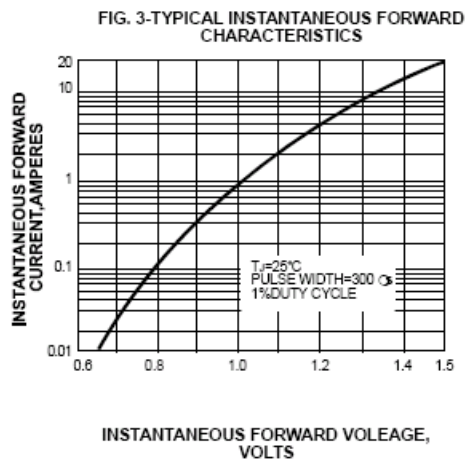
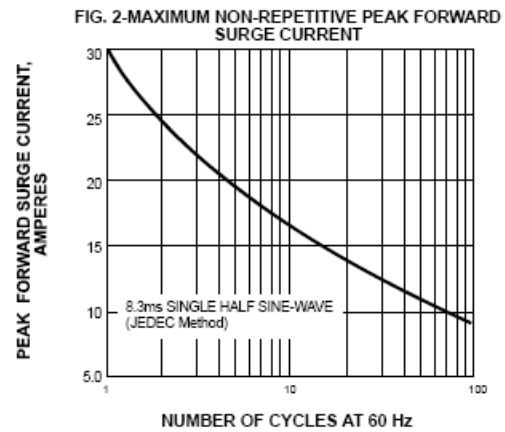
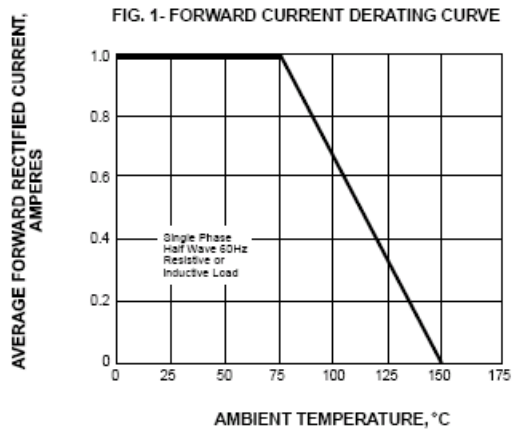
Characteristic	Symbol	FR101	FR102	FR103	FR104	FR105	FR106	FR107	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at T _A =75°C	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.3							V
Maximum DC reverse current T _A =25 °C at rated DC blocking voltage T _A =100 °C	I _R	5.0 50.0							µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C _J	15.0							pF
Typical Thermal Resistance (Note 3)	R _{θJA}	50.0							°C/W
Junction Temperature	T _J	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

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

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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

RATINGS AND CHARACTERISTIC CURVES FR101 THRU FR107







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