

Fast Recovery Rectifiers

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.0 A

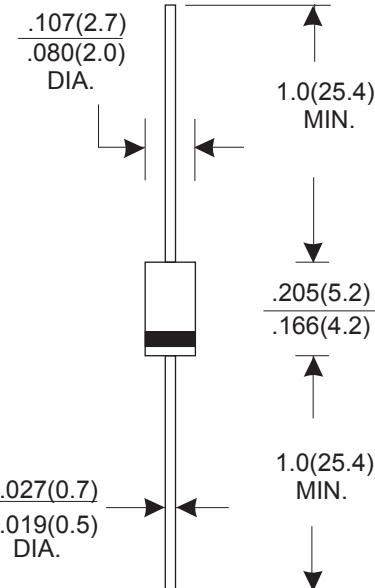
FEATURES

- Low cost construction
- 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 at 5 lbs
(2.3kg)tension

MECHANICAL DATA

- Case: transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end.
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208c
- Mounting position: Any

DO-41



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

	SYMBOLS	FR101	FR102	FR103	FR104	FR105	FR106	FR107	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Average Forward Current TJ=90°C	IF(AV)				1.0				Amps
Peak Forward Surge Current 8.3ms, half sine	IFSM				30				Amps
Maximum Instantaneous Forward Voltage IFM=1.0A TJ=25°C	VF				1.3				Volts
Maximum DC Reverse Current at rated DC blocking voltage	TA=25°C TA=100°C	IR			5.0				µA
Maximum reverse recovery time at IF=0.5A IR=1.0A, IRR=0.25A	trr,			150		250	500		ns
Typical Junction Capacitance	CJ			15					PF
Typical thermal resistance	R _{JA}			50					°C/W
Operating junction and storage temperature range	TJ Tstg			-65to+150					°C

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0Volts

2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P,C,board mounted.

3. Reverse Recovery Test Condition: IF=0.5A, IR=1.0A, TRR=0.25A