

Voltage Range - 50 to 1000 V Forward Current - 3 Ampere

FAST RECOVERY RECTIFIER

FEATURES

- Low cost construction
- Fast switching for high efficiency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:

260°C/10 secods/.375"(9.5mm)lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

Case: Transfer molded plastic

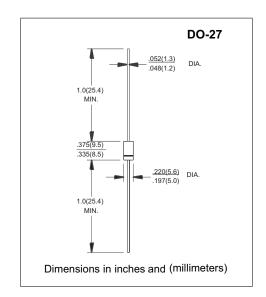
■ Epoxy: UL94V-O rate flame retardant

Polarity: Color band denotes cathode end

Lead: Plated axial lead, solderable per MIL-STD-202E method 208C

Mounting position: Any

■ Weight: 0.042ounce, 1.19 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

 Ratings at 25 °C ambient temperature unless otherwise specified Single Phase, half wave, 60Hz, resistive or inductive load for capacitive load derate current by 20%

	SYMBOLS	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0 375"(9.5mm) lead length at T _A = 75 ℃	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current 8 3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	125						Amps	
Maximum Instantaneous Forward Voltage @ 3.0A	V_{F}	1.3					Volts		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I_R	10							μА
		500							
Maximum Reverse Recovery Time (Note 3) T _J =25 °C	trr	150 250 500				ns			
Typical Junction Capacitance (Note 1)	C_{J}	60						pF	
Typical Thermal Resistance (Note 2)	$R_{ heta JA}$	20					°C/W		
Operating Junction Temperature Range	T_{J}	(-55 to +150)							$^{\circ}\mathbb{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^{\circ}$ C

Notes:

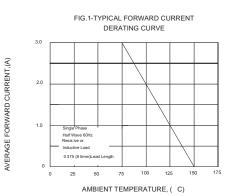
- 1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0Volits.
- 2 Thermal Resistance from junction to Ambient at .375"(9.5mm)lead length, P.C.board mounted.
- 3. Reverse Recovery Test Conditions: If=0.5mA, Ir=1.0mA, Irr=0.25A

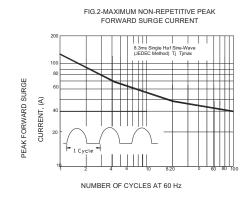
Email: sales@micindia.com Website: www.micindia.com

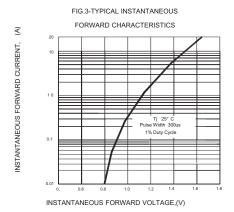
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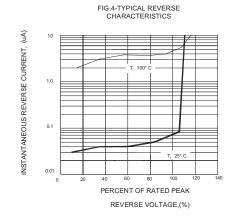
FAST RECOVERY RECTIFIER

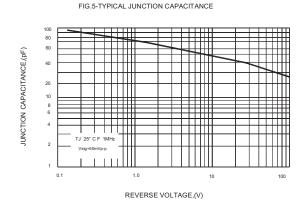
RATING AND CHARACTERISTIC CURVES FR301 - FR307

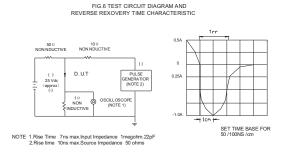












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Email: sales@micindia.com Website: www.micindia.com