

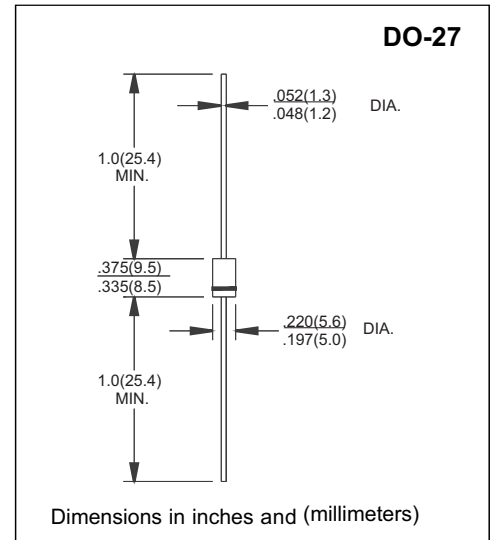
ULTRA FAST RECTIFIER

FEATURES

- Low cost construction
- Fast switching for high efficiency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds/.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%

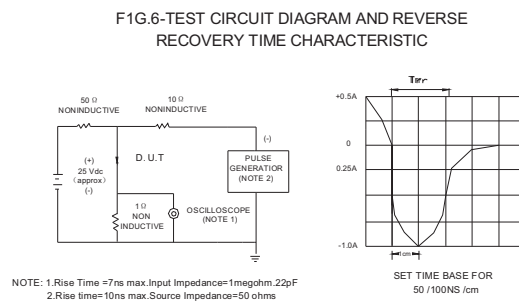
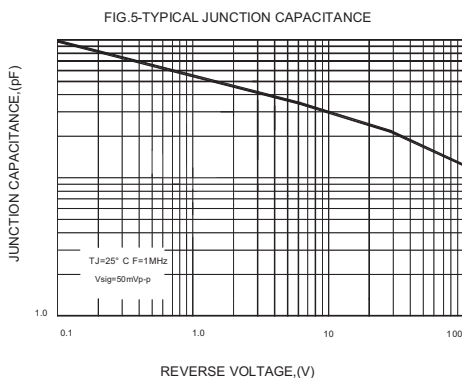
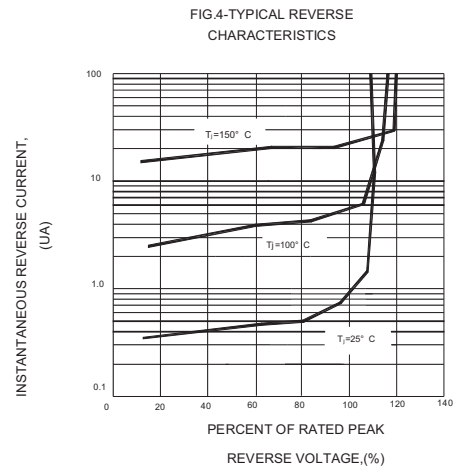
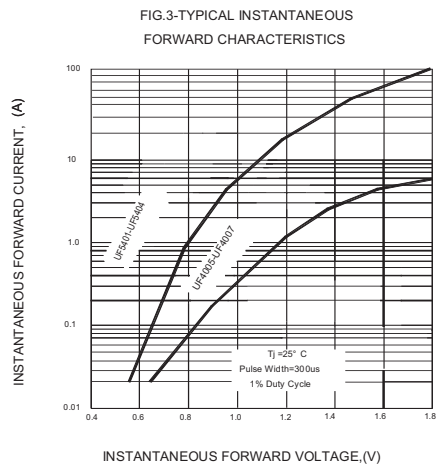
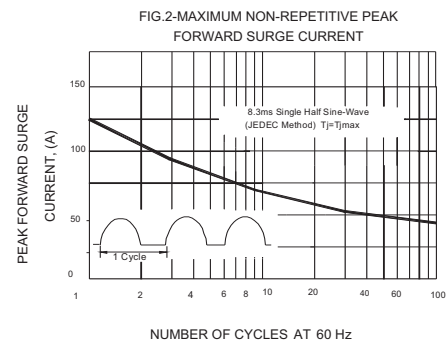
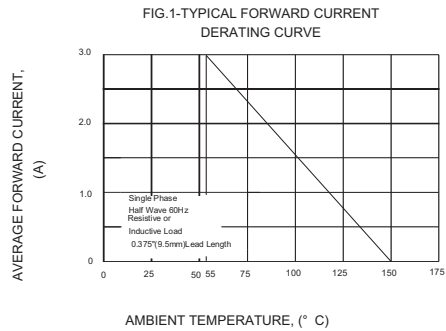
PARAMETER	SYMBOLS	UF 5400	UF 5401	UF 5402	UF 5403	UF 5404	UF 5405	UF 5406	UF 5407	UF 5408	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length at $T_A = 55^\circ C$	$I_{(AV)}$	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	1.0			1.7						Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ C$	10									μA
	$T_A = 125^\circ C$	50									
Maximum Reverse Recovery Time $T_{JF} = 25^\circ C$ (NOTE 1)	t_{rr}	50			75						ns
Typical Thermal Resistance (NOTE 2)	C_J	45									PF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$	20									$^\circ C/W$
Operating Junction Temperature Range	T_J, T_{STG}	(-55 to +150)									$^\circ C$

Notes:

- 1 Test Condition: $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Measured at 1.0 MHz and applied reverse of 4.0 volts.
- 3 Thermal resistance from junction to ambient with .375"(9.5mm)lead length, P.C.B. mounted. .

ULTRA FAST RECTIFIER

RATING AND CHARACTERISTIC CURVES UF5400 - UF5408



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.