UF3001-G Thru. UF3008-G

Voltage: 50 to 1000 V
Current: 3.0 A
RoHS Device

Features

-Low cost construction.

-Ultra fast switching for high efficiency.

-Low reverse leakage current.

-High forward voltage drop.

-High current capability.

-The plastic material carries UL recognition 94V-0

Mechanical data

-Case: JEDEC DO-27 molded plastic .

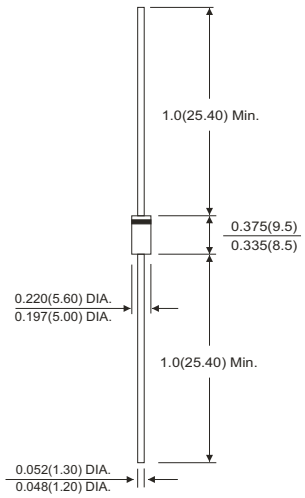
-Polarity: Color band denotes cathode.

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

-Mounting position: Any

-Weight: 0.04 ounces, 1.1 grams

DO-27



Dimensions in inches and (millimeter)

Electrical Characteristics (at TA=25°C unless otherwise noted)

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		Symbol	UF3001-G	UF3002-G	UF3003-G	UF3004-G	UF3005-G	UF3006-G	UF3007-G	UF3008-G	Unit
		Marking	UF3001	UF3002	UF3003	UF3004	UF3005	UF3006	UF3007	UF3008	
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length @T_A=55		$I_{(AV)}$	3.0								A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	125								A
Peak forward voltage at 3.0A DC		V_F	1.0			1.3		1.7			V
Maximum reverse current at rated DC blocking voltage	T_A=25°C	I_R	5.0								μA
	T_A=100°C	I_R	100								μA
Maximum reverse recovery time (Note 1)		t_{rr}	50					75			nS
Typical junction capacitance (Note 2)		C_J	50					30			PF
Typical thermal resistance (Note 3)		$R_{\theta JA}$	20								°C/W
Operating temperature range		T_J	-55 ~ +125								°C
Storage temperature range		T_{STG}	-55 ~ +150								°C

NOTES:
1. Measured with I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0Volts.
3. Thermal resistance junction to ambient.

REV:A

Rating and Characteristic Curves (UF3001-G Thru. UF3008-G)

Fig.1 Forward Current Derating Curve

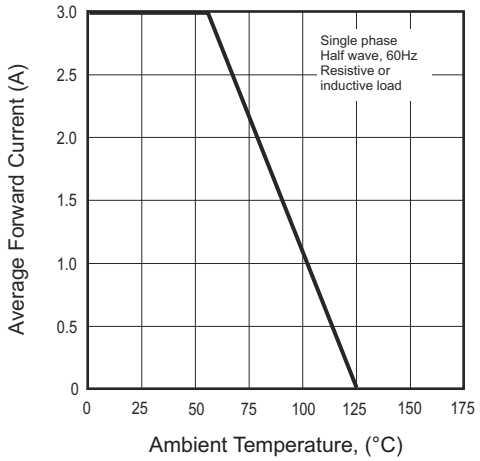


Fig.2 Maximum Non-Repetitive Surge Current

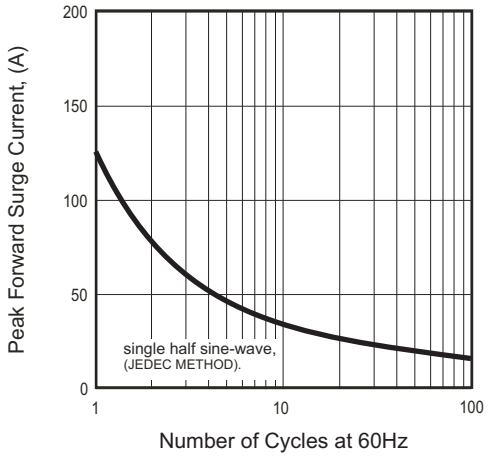


Fig.3 Typical Junction Capacitance

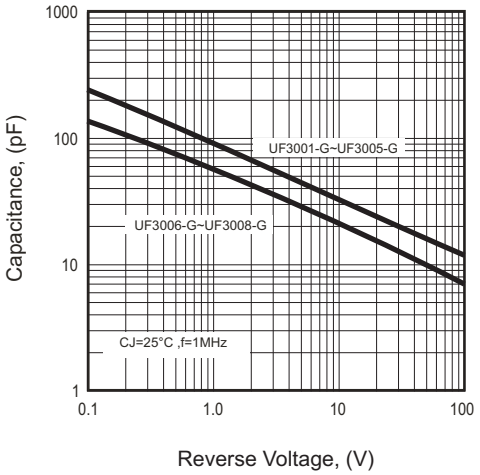
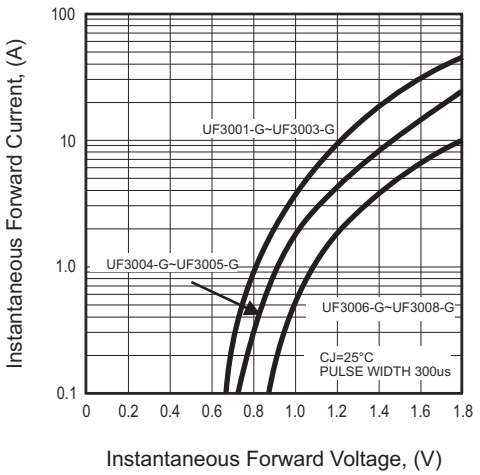
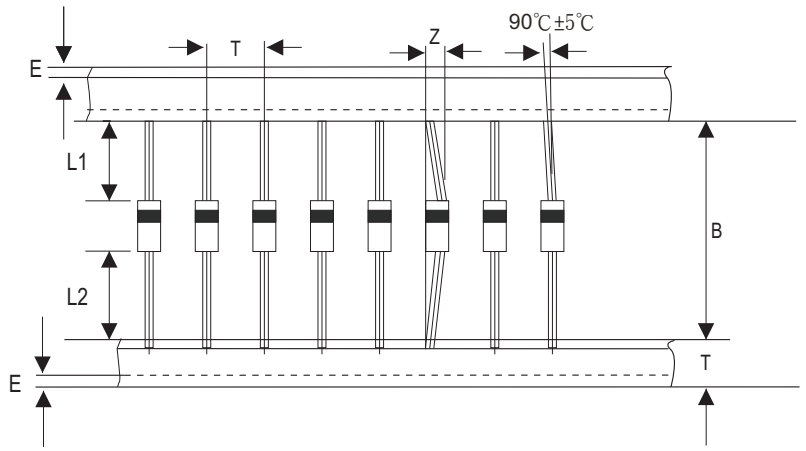
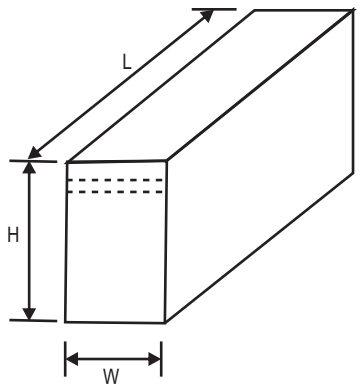


Fig.4 Typical Forward Characteristics



Taping Specification For Axial Lead Diodes





	SYMBOL	A	B	Z	T	E	L1-L2	L
DO-27	(mm)	10.0 ± 0.50	52.4 ± 1.5	1.2 (max)	6.0 ± 0.4	0.8 (max)	1.0 (max)	255.0 ± 5.0
	(inch)	0.394± 0.020	2.063 ± 0.059	0.047 (max)	0.236 ± 0.016	0.032(max)	0.040 (max)	10.039 ± 0.197

	SYMBOL	W	H					
DO-27	(mm)	78.0 ± 5.0	95.0 ± 5.0					
	(inch)	3.071 ± 0.197	3.740 ± 0.197					

Standard Packaging

Case Type	AMMO PACK	
	BOX (pcs)	CARTON (pcs)
DO-27	1,200	12,000