



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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UF3001-G Thru. UF3008-G

Voltage: 50 to 1000 V

Current: 3.0 A

RoHS Device

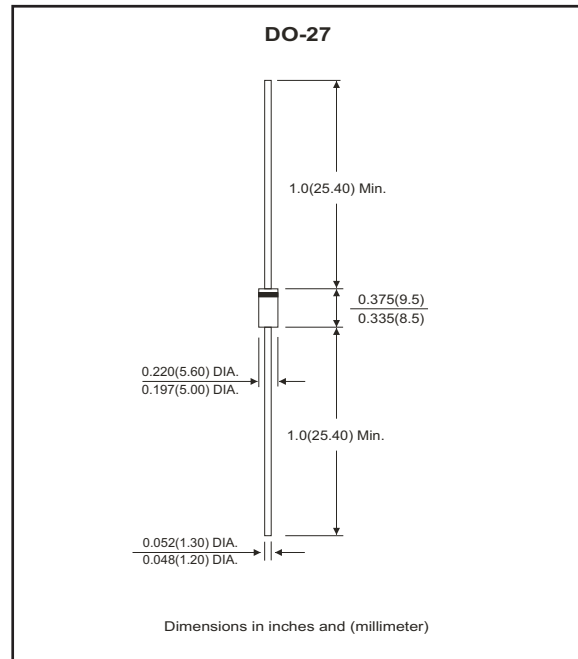


Features

- 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



Electrical Characteristics (at $T_A=25^\circ\text{C}$ 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	$T_A=25^\circ\text{C}$	5.0								μA
	$T_A=100^\circ\text{C}$	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								$^\circ\text{C/W}$
Operating temperature range	T_J	-55 ~ +125								$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150								$^\circ\text{C}$

NOTES:

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

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

Fig.1 Forward Current Derating Curve

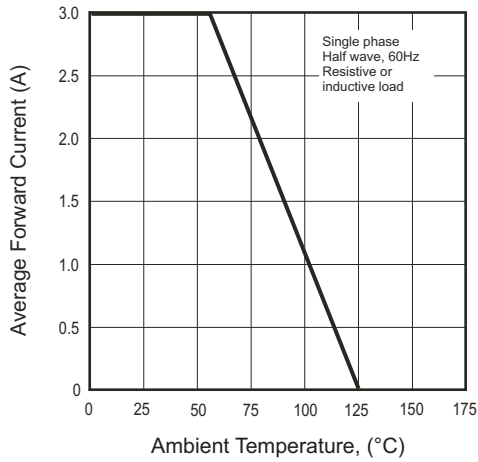


Fig.2 Maximum Non-Repetitive Surge Current

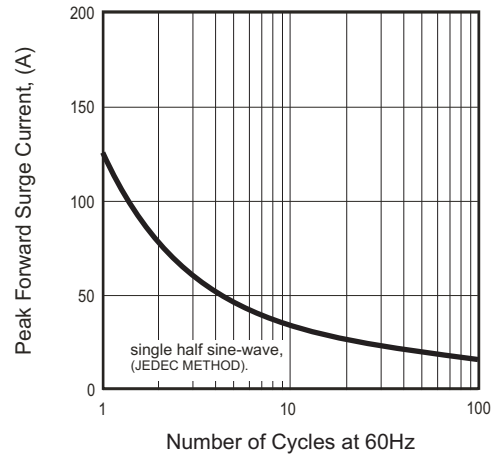


Fig.3 Typical Junction Capacitance

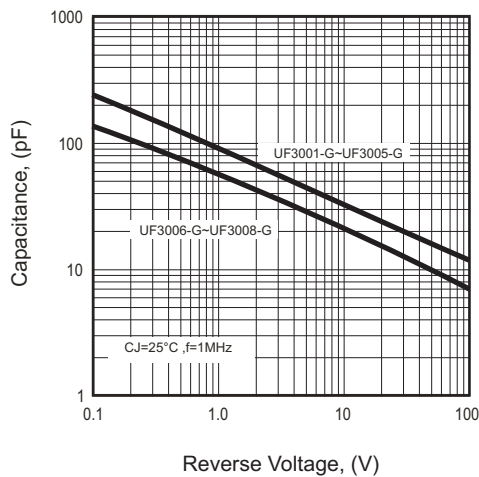
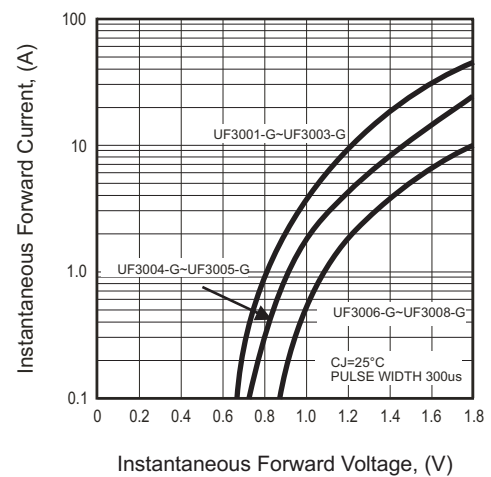
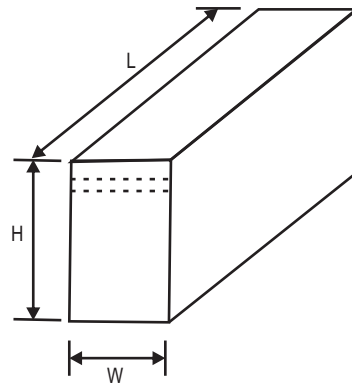
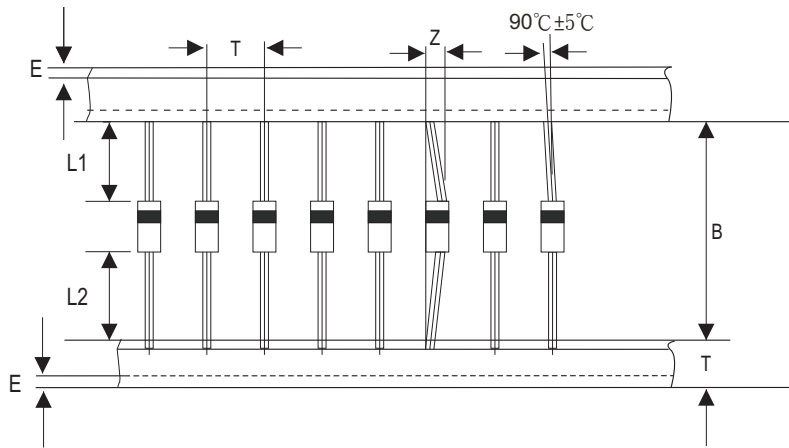


Fig.4 Typical Forward Characteristics



Taping Specification For Axial Lead Diodes



DO-27	SYMBOL	A	B	Z	T	E	L1-L2	L
	(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

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

Standard Package

Case Type	BOX		
	BOX (EA)	Box / Carton	CARTON (EA)
DO-27	1200	10	12000