

Features

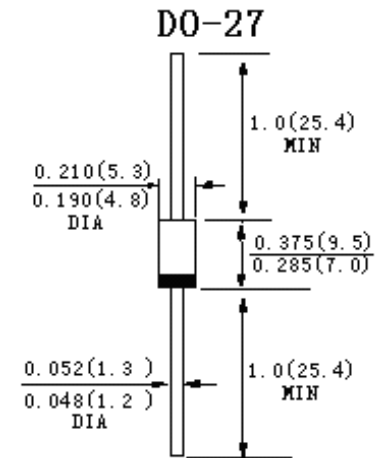
- Low reverse leakage
- High forward surge capability
- High reliability
- Ultrafast recovery time for high efficiency
- High temperature soldering guaranteed: 260°C/10seconds, 9.5mm lead length
- Lead and body according with RoHS standard

Mechanical Data

Case: DO-27 Molded plastic

Mounting Position: Any

Lead: Pure tin plated, lead free



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

TYPE NUMBER	Symbol	UF 5400	UF 5401	UF 5402	UF 5403	UF 5404	UF 5406	UF 5407	UF 5408	Unit
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 9.5mm lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current, 8.3ms single half-wave superimposed on rated load (JEDEC method)	I_{FSM}	150								A
Maximum instantaneous forward voltage at 3.0A	V_F	1.0		1.3		1.7			V	
Maximum reverse recovery time (Note1)	T_{rr}	50					75			nS
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_{R1}								μA
	$T_A=100^\circ\text{C}$	I_{R2}								μA
Operating junction temperature range	T_J	-55to+150								$^\circ\text{C}$
Storage temperature range	T_{stg}	-55to+150								$^\circ\text{C}$

Note: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$.

Characteristic Curves

Fig. 1 - Forward Current Derating Curve

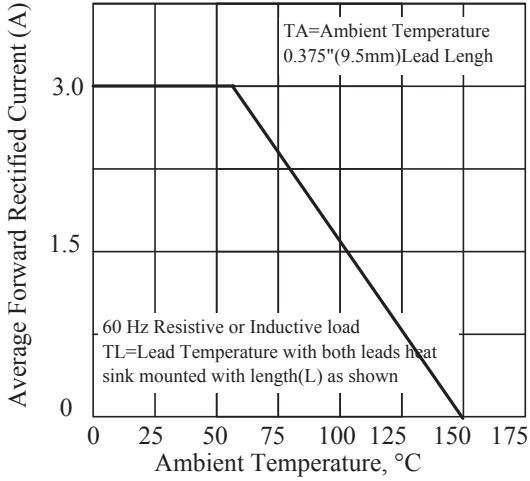


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

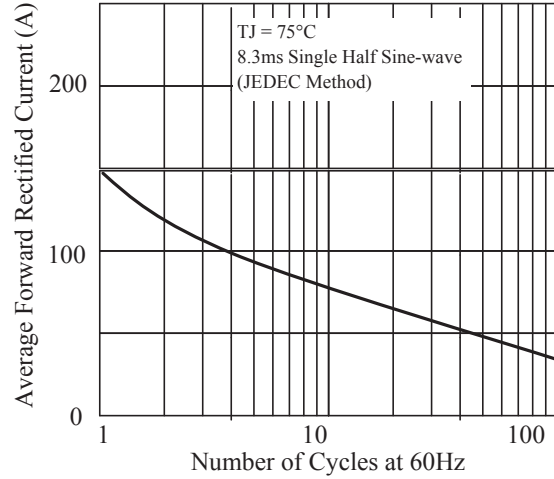


Fig. 3 - Typical Instantaneous Forward Characteristics

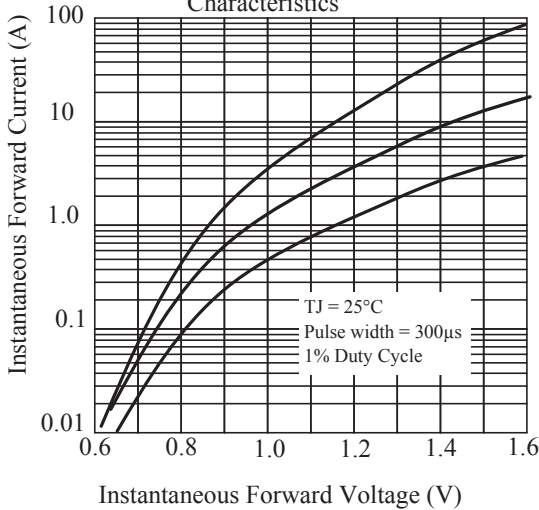


Fig. 4 - Typical Reverse Characteristics

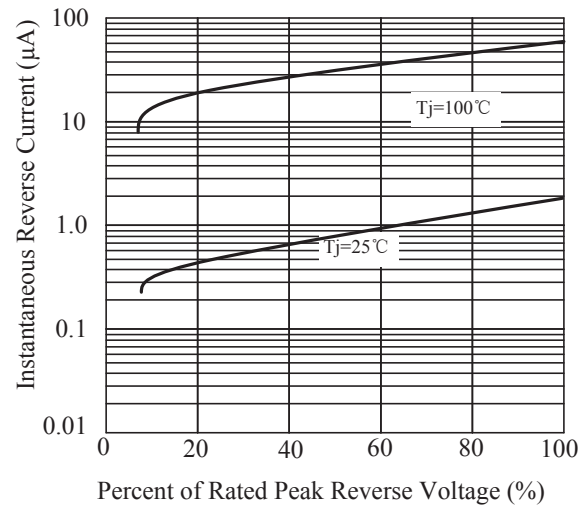


Fig. 5 - Typical Junction Capacitance

