



UF5400G THRU UF5408G

Glass Passivated Ultra Fast Recovery Rectifier

Features

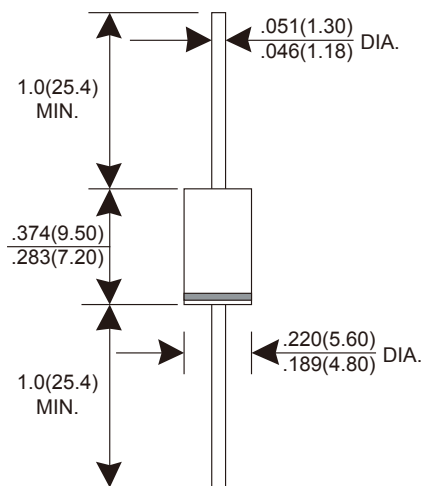
- ★ Fast switching for high efficiency
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic, DO-201AD
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202, method 208
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

Voltage Range 50 to 1000 V
Current 3.0 Ampere

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	UF 5400G	UF 5401G	UF 5402G	UF 5404G	UF 5406G	UF 5407G	UF 5408G	UNIT	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum average forward rectified current @T _A =55°C	I _{F(AV)}	3.0							A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	125							A	
Maximum instantaneous forward voltage @ I _F =3.0A	V _F	1.0		1.3		1.7			V	
Maximum DC reverse current at rated DC blocking voltage @T _A =25°C @T _A =125°C	I _R	1 150							μA	
Maximum reverse recovery time (Note 1)	t _{rr}	50				75				ns
Typical junction capacitance (Note 2)	C _J	70				50				pF
Typical thermal resistance from junction to ambient (Note 3)	R _{θJA}	30							°C/W	
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C	

NOTES : (1) Reverse recovery test conditions I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

RATINGS AND CHARACTERISTICS CURVES UF5400G THRU UF5408G

Fig.1 - Forward Current Derating Curve

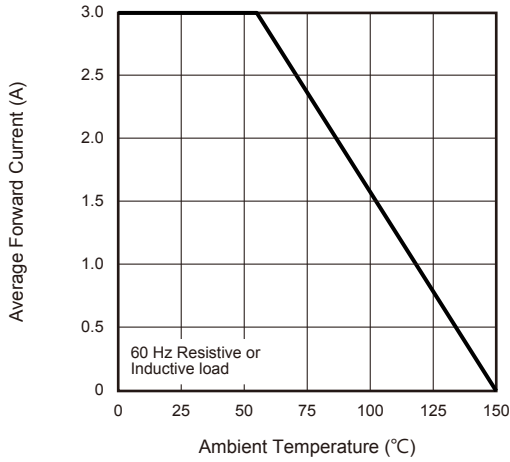


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

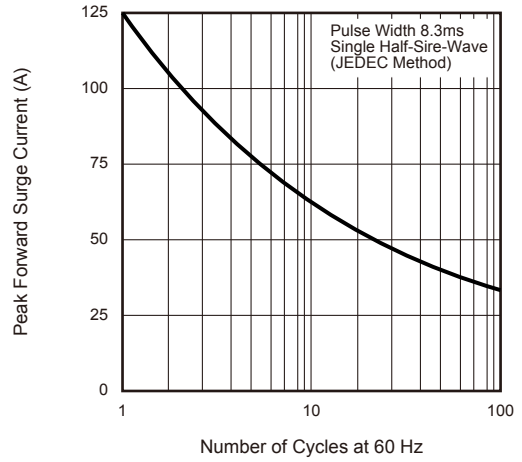


Fig.3 - Typical Instantaneous Forward Characteristics

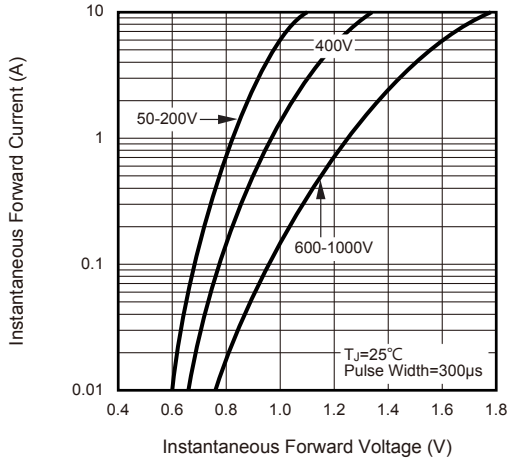


Fig.4 - Typical Reverse Leakage Characteristics

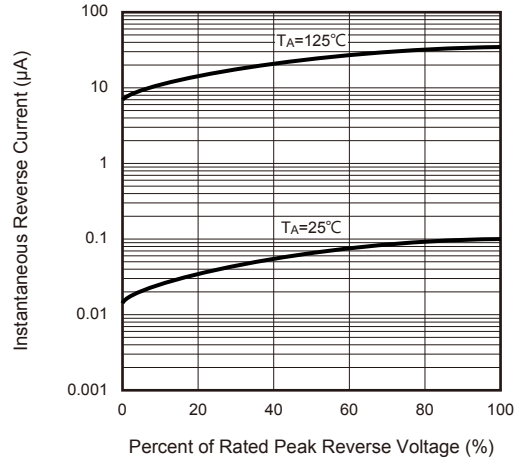


Fig.5 - Typical Junction Capacitance

