



DATA SHEET

UF5401G~UF5407G

GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIER

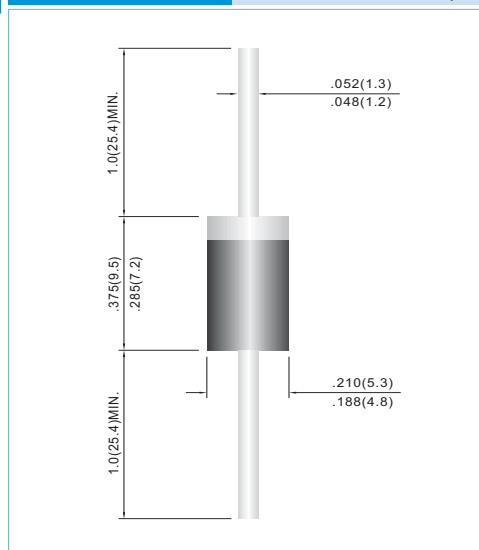
VOLTAGE 100 to 800 Volts **CURRENT** 3.0 Amperes **DO-201AD** Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast switching for high efficiency.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, DO-201AD
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Band denotes cathode
Mounting Position: Any
Weight: 0.04 ounce, 1.1 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS FEATURES

Ratings at 25°C ambient temperature unless otherwise specified.

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

PARAMETER	SYMBOL	UF5401G	UF5402G	UF5403G	UF5404G	UF5405G	UF5406G	UF5407G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	300	400	500	600	800	V
Maximum RMS Voltage	V _{RMS}	70	140	210	280	350	420	560	V
Maximum DC Blocking Voltage	V _{DC}	100	200	300	400	500	600	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I _{AV}	3.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150							A
Maximum Forward Voltage at 3.0A	V _F	1.0		1.3		1.5		1.7	V
Maximum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =100°C	I _R	10.0 300							uA
Typical Junction capacitance (Note 1)	C _J	75							pF
Typical Thermal Resistance(Note 2)	R _{θJA}	60							°C / W
Maximum Reverse Recovery Time (Note 3)	T _{RR}	50				75			ns
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 TO +150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.
3. Test Condition: Ta = Tj Per pulse test pulse width 300uS duty ≤ 2%



RATING AND CHARACTERISTIC CURVES

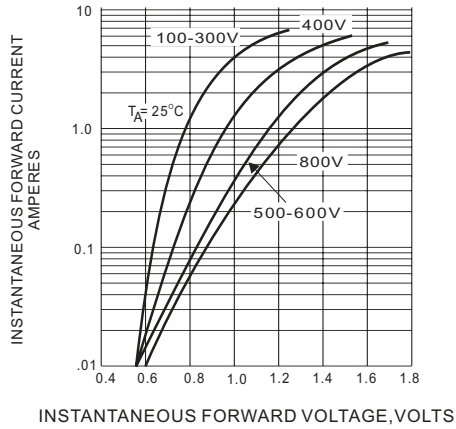


Fig.1 FORWARD CHARACTERISTICS

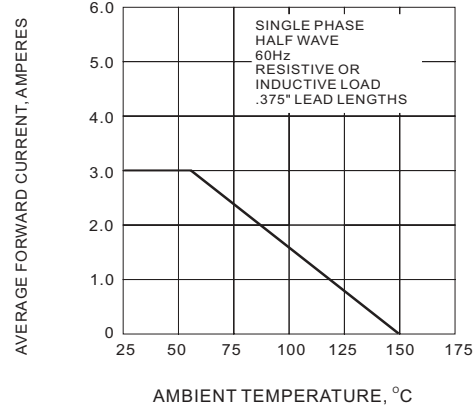


Fig.2 FORWARD CURRENT DERATING CURVE

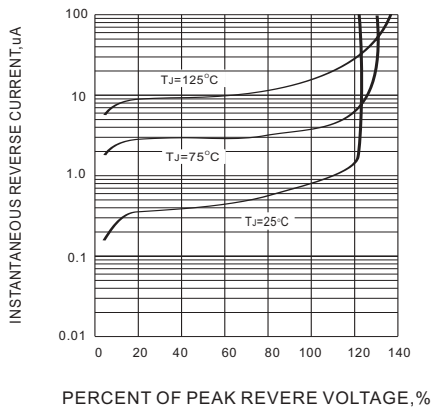


Fig.3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

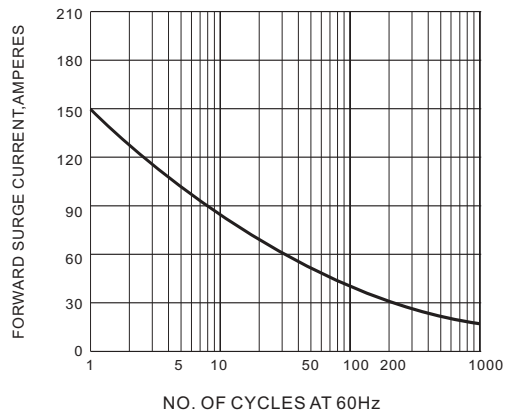


Fig.4 PEAK FORWARD SURGE CURRENT