



# DATA SHEET

## UF5401G~UF5407G

### GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIER

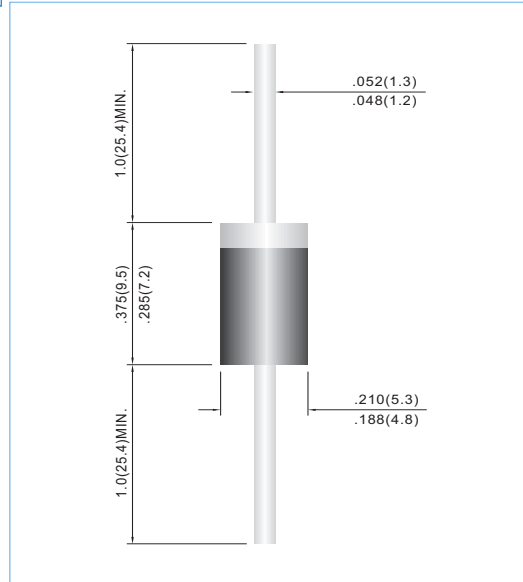
**VOLTAGE** 100 to 800 Volts **CURRENT** 3.0 Amperes **DO-201AD** Unit: inch(mm)

#### 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 $T_A=55^\circ C$	$I_{AV}$				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 $T_J=25^\circ C$ at Rated DC Blocking Voltage $T_J=100^\circ C$	$I_R$				10.0 300				$\mu A$
Typical Junction capacitance (Note 1)	$C_J$				75				pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$				60				$^\circ C / W$
Maximum Reverse Recovery Time (Note 3)	$T_{RR}$	50						75	ns
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$				-55 TO +150				$^\circ C$

#### NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.
- Test Condition:  $T_a = T_j$  Per pulse test pulse width 300 $\mu s$  duty  $\leq 2\%$



**RATING AND CHARACTERISTIC CURVES**

