



UG06A THRU UG06D

0.6 AMP. Ultrafast Plastic Rectifiers



Voltage Range
50 TO 200 Volts
Current
0.6 Ampere

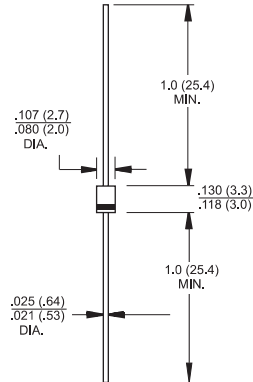
Features

- ✦ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ✦ Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- ✦ Ultrafast recovery time for high efficiency
- ✦ Excellent high temperature switching
- ✦ Glass passivated junction
- ✦ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

Mechanical Data

- ✦ Cases: Void free molded plastic body over glass passivated chip
- ✦ Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- ✦ Polarity: Color band denotes cathode end
- ✦ Mounting position: Any
- ✦ Weight: 0.0064 ounce, 0,181 gram

TS-1



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	UG06A	UG06B	UG06C	UG06D	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @ $T_L = 75^\circ\text{C}$	$I_{(AV)}$	0.6				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) @ $T_L = 75^\circ\text{C}$	I_{FSM}	40				A
Maximum Instantaneous Forward Voltage @ 0.6A	V_F	0.95				V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 100				μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	15				nS
Typical Junction Capacitance (Note 2)	C_j	9.0				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	97 28				$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150				$^\circ\text{C}$

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

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) Lead Length. Mount on Cu-Pad Size 0.2" x 0.2" (5mm x 5mm) on PCB.

RATINGS AND CHARACTERISTIC CURVES (UG06A THRU UG06D)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

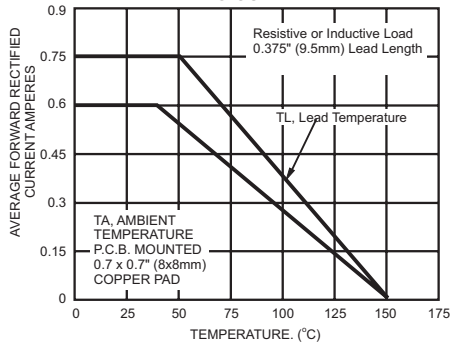


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

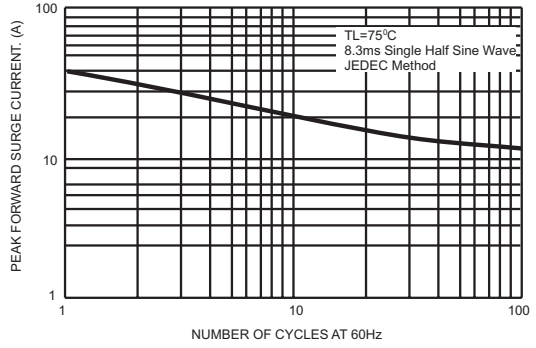


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

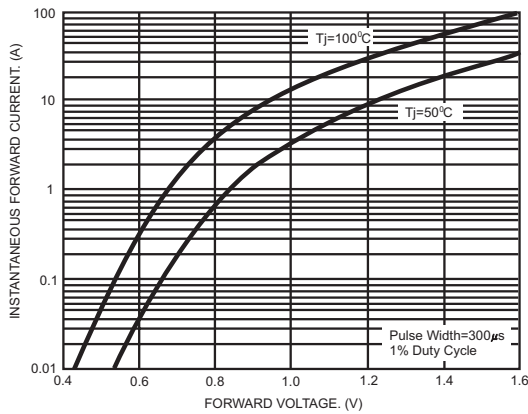


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

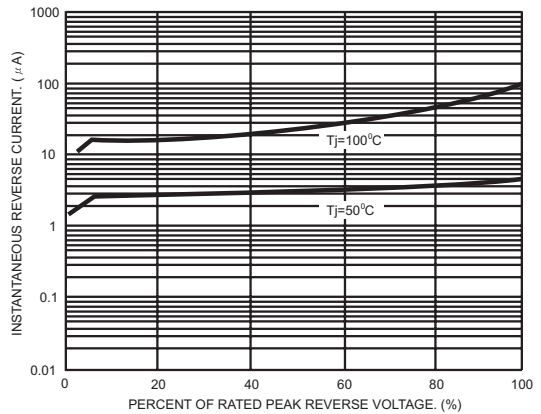


FIG. 5- TYPICAL JUNCTION CAPACITANCE

