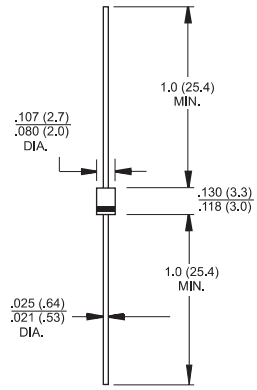
UG06A THRU UG06D

0.6 AMP. Ultrafast Plastic Rectifiers

Voltage Range
50 TO 200 Volts
Current
0.6 Ampere

TS-1



Dimensions in inches and (millimeters)

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℃/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

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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℃	$I_{(AV)}$	0.6				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40				A
Maximum Instantaneous Forward Voltage @ 0.6A	V_F	0.95				V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=100℃	I_R	5.0 100				uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	15				nS
Typical Junction Capacitance (Note 2)	Cj	9.0				pF
Typical Thermal Resistance (Note 3)	$R\theta_{JA}$ $R\theta_{JL}$	97 28				℃/W
Operating Temperature Range	T_J	-55 to +150				℃
Storage Temperature Range	T_{STG}	-55 to +150				℃

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
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 P.C.B

RATINGS AND CHARACTERISTIC CURVES (UG06A THRU UG06D)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

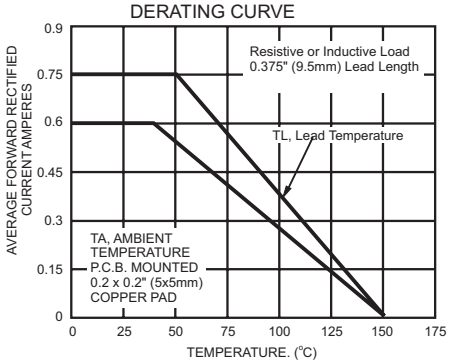


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

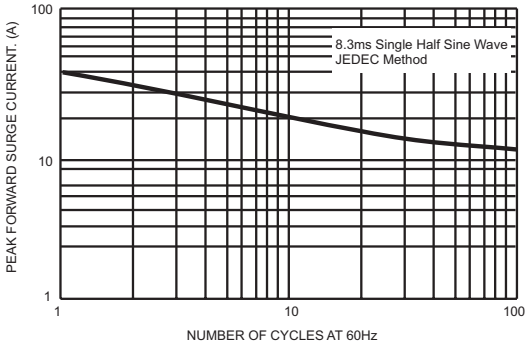


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

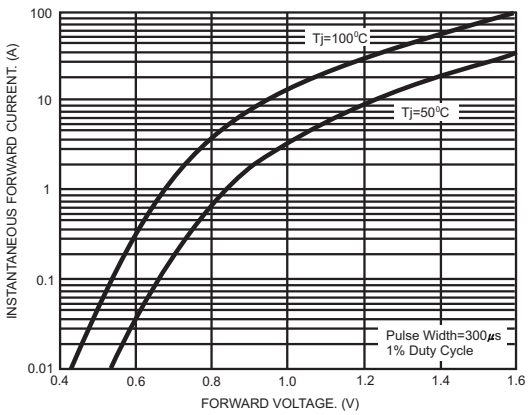


FIG.4- TYPICAL REVERSE CHARACTERISTICS

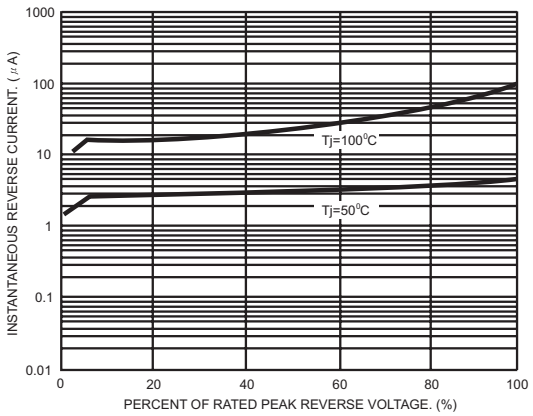


FIG.5- TYPICAL JUNCTION CAPACITANCE