

AMOSPEC

UGU6A THRU UGU6K

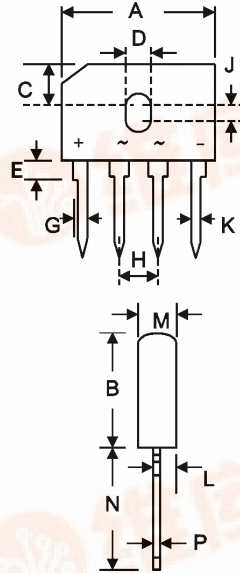
6.0A ULTRA-FASTGLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

- *Glass Passivated Die Construction
- *Low Forward Voltage Drop
- *High Current Capability
- *High Reliability
- *High Surge Current Capability
- *High-Switching Speed 100 Nanosecond Recovery Time

MECHANICAL DATA

- *Case: Molded Plastic
- *Epoxy: UL94V-O rate flame retardant
- *Terminals : Plated Leads Solderable
Per MIL-STD-202 Method 208
- *Polarity : As Marking on Body
- *Mounting Position: Any
- *Weight : 4.0 gram (approx.)
- *Marking:Type Number



UBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	7.40	7.90
D	3.50	4.10
E	1.52	2.03
G	2.16	2.54
H	4.83	5.33
J	1.65	2.16
K	1.65	2.03
L	0.76	1.02
M	3.30	3.56
N	17.50	18.00
P	0.46	0.56
Unit :mm		

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 %

Characteristic	Symbol	UGU6A	UGU6B	UGU6D	UGU6G	UGU6J	UGU6K	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	V
Average Rectifier Forward Current @ $T_C=100^\circ\text{C}$	$I_{O(AV)}$	6.0						A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load	I_{FSM}	175						A
Forward Voltage (per element) ($I_F=2.0\text{ Amp}$)	V_{FM}	1.0						V
Peak Reverse Current (Rated DC Voltage, $T_C=25^\circ\text{C}$) (Rated DC Voltage, $T_C=100^\circ\text{C}$)	I_R	5.0 500						μA
$I^2 t$ Rating for Fusing($t<8.35\text{MS}$)	$I^2 t$	127						A^2s
Typical Thermal Resistance (per leg)(note 1)	$R_{\theta JA}$	8.6						k/W
Typical Thermal Resistance (per leg)(note 2)	$R_{\theta JC}$	3.1						k/W
Reverse Recovery Time ($I_F=0.5\text{ A}$, $I_R=1.0$, $I_{rr}=0.25\text{ A}$)	T_{rr}	100						ns
Operating and Storage Temperature Range	T_J, T_{stg}	-65 to +150						$^\circ\text{C}$

Note: 1. Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length with 12 mm² copper pads.
2. Thermal resistance junction to case, mounted on 5.0×4.0×0.8 cm thick AL plate.

UGU6A thru UGU6K

FIG-1 FORWARD CURRENT DERATING CURVE

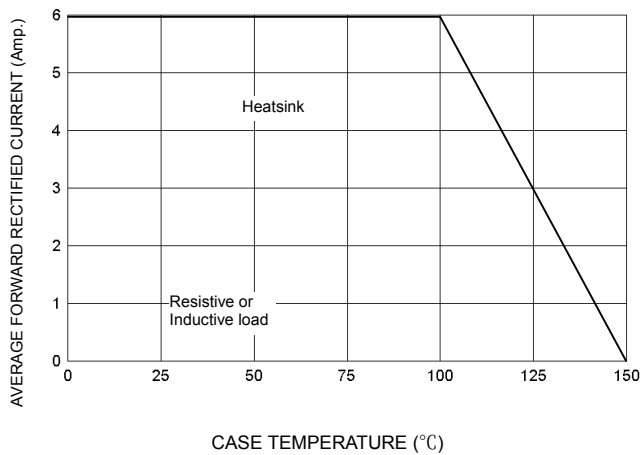


FIG-2 TYPICAL FORWARD CHARACTERISTICS

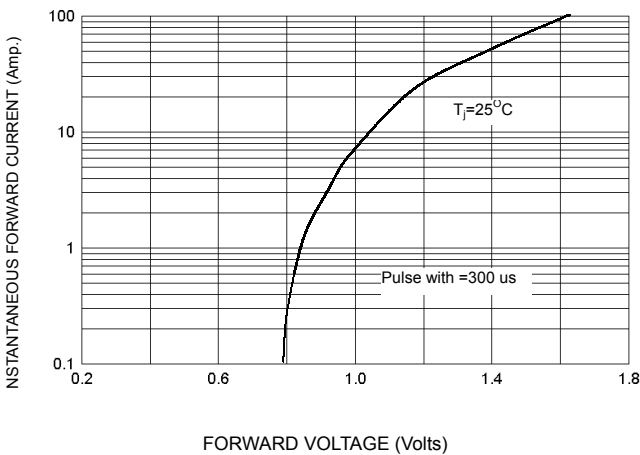


FIG-3 PEAK FORWARD SURGE CURRENT

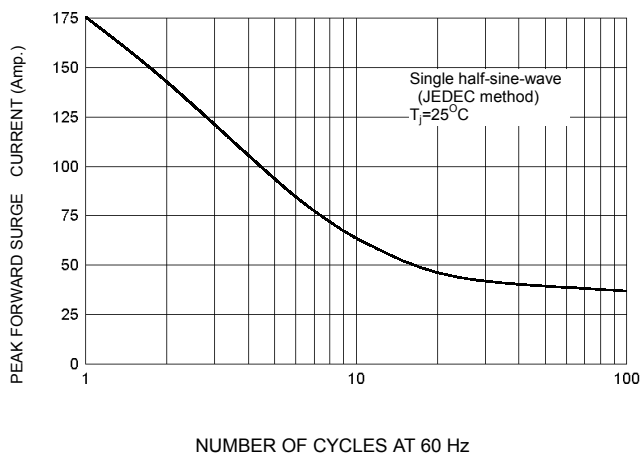


FIG-4 TYPICAL JUNCTION CAPACITANCE

