

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Super Fast Recovery Times For High Efficiency
- Halogen Free. "Green" Device (Note 2)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 12 °C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UG3AB	UG3AB	50V	35V	50V
UG3BB	UG3BB	100V	70V	100V
UG3CB	UG3CB	150V	105V	150V
UG3DB	UG3DB	200V	140V	200V
UG3GB	UG3GB	400V	280V	400V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

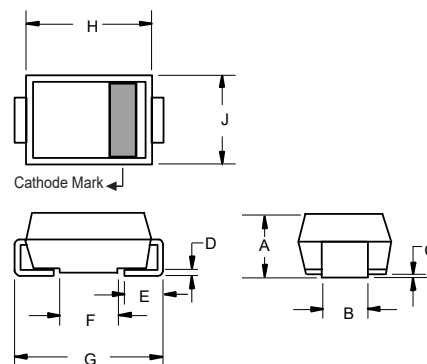
Average Forward Current	$I_{F(AV)}$	3.0A	$T_L=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	90A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage UG3AB-UG3DB UG3GB	$V_F$	0.92V 1.25V	$I_{FM}=3.0A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0μA 100μA	$T_J=25^\circ\text{C}$ ; $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{RR}$	25ns	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{rr}=0.25A$

\*Pulse Test: Pulse Width 300 μsec, Duty Cycle 2%

1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

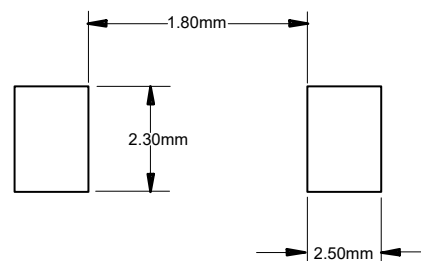
# 3 Amp Super Fast Recovery Silicon Rectifier 50 to 400 Volts

## SMB (DO-214AA)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

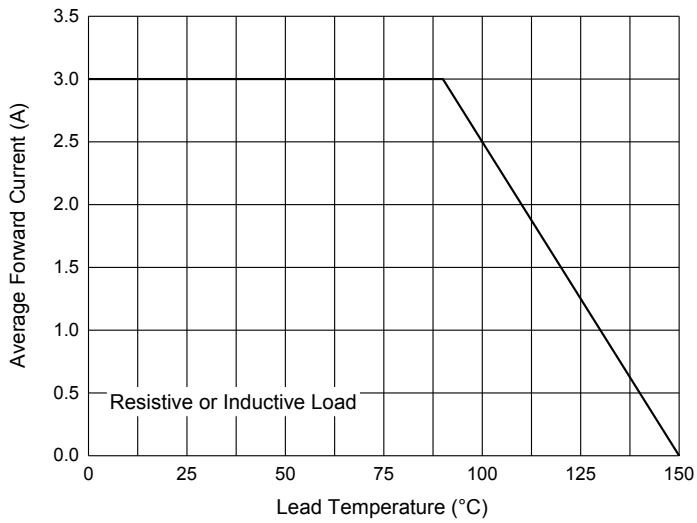


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

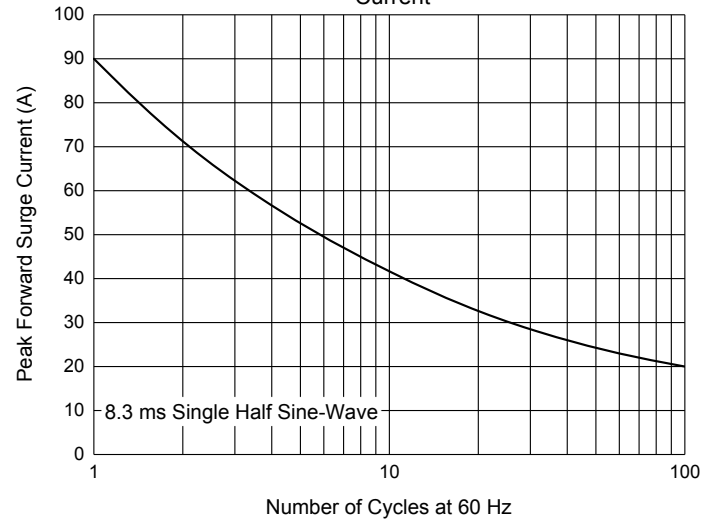


Fig. 3 - Typical Instantaneous Forward Characteristics

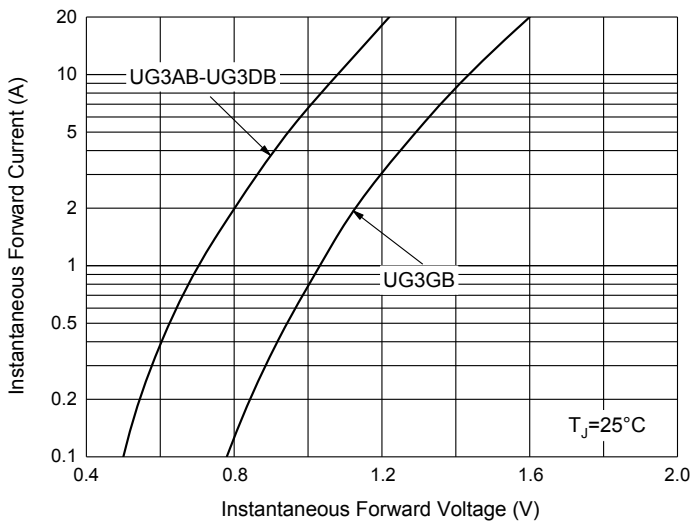
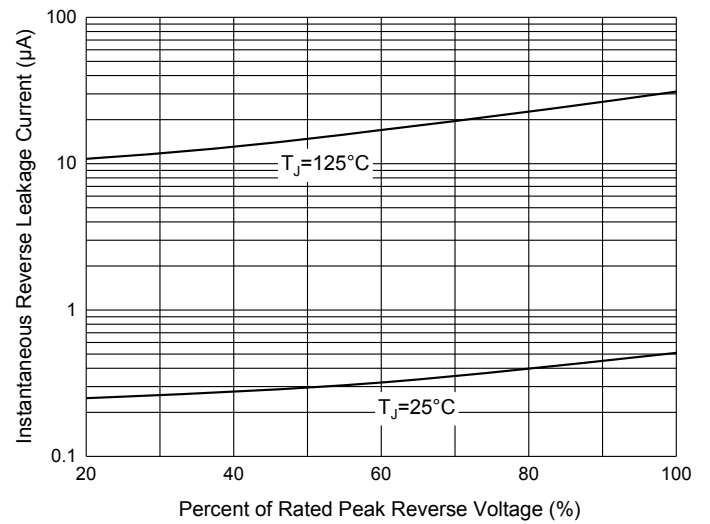


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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