Semiconductor

Preliminary Data Sheet

3.0 Amp Glass Passivated Sintered Ultra - Fast Rectifiers

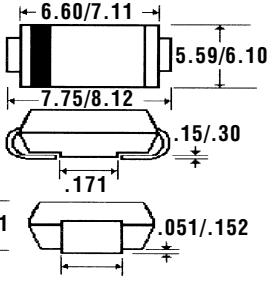
UGFZ30A . . . 30G Series

Description

OMNIPAC™ INSIDE

Mechanical Dimensions

Package "SMC"



Features

- **LOWEST COST FOR GLASS SINTERED ULTRA - FAST CONSTRUCTION**
- **LOWEST V_F FOR GLASS SINTERED ULTRA - FAST CONSTRUCTION**
- **TYPICAL I_R < 100 nAmps**
- **3.0 AMP OPERATION @ T_A = 55°C, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

Electrical Characteristics @ 25°C.	***UGFZ30A . . . 30G Series***				**Units**
Maximum Ratings	**30A**	**30B**	**30D**	**30G**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	400	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	280	Volts
DC Blocking Voltage...V_{DC}	50	100	200	400	Volts
Average Forward Rectified Current...$I_{F(av)}$ Current 3/8" Lead Length @ T_A = 55°C	3.0				Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} 8.3mS, ½ Sine Wave Superimposed on Rated Load	125				Amps
Forward Voltage @ 3.0A...V_F	< 0.95			> 1.25	Volts
Full Load Reverse Current...I_R(av) Full Cycle Average @ T_A = 55°C	100				µAmps
DC Reverse Current...$I_{R(max)}$ T_A = 25°C	10				µAmps
@ Rated DC Blocking Voltage T_A = 150°C	200				
Typical Junction Capacitance...C_J *(Note 1)*	60				pF
Typical Thermal Resistance...$R_{\theta JA}$ *(Note 2)*	15				°C/W
Maximum Reverse Recovery Time...t_{RR} *(Note 3)*	35				nS
Operating & Storage Temperature Range...T_J, T_{STRG}	-65 to 175				°C

NOTES: 1. Measured @ 1 MHZ and applied reverse voltage of 4.0V.
2. 5.0mm² (.013mm thick) land areas.
3. Reverse Recovery Condition I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.