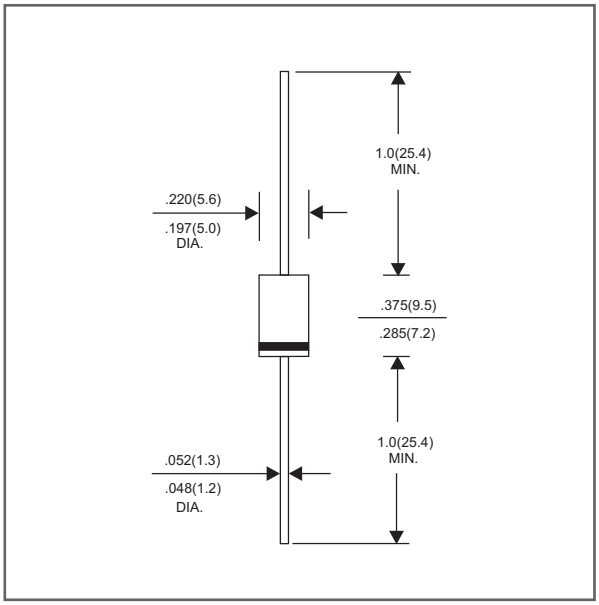
1N5400G THRU 1N5408G

Slilcon Rectifier

3.0A Leaded Type Glass Purpose Rectifiers - 50V-1000V

Package outline

DO-201AD



Dimensions in inches and (millimeters)

Features

- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivated chip junction inside.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" indicates Halogen-free parts, ex. 1N5400G-H.

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, DO-201AD
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity: Color band denotes cathode end
- Mounting Position : Any
- Weight : Approximated 1.10 gram

Maximum ratings (AT T =25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			3.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			125	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^oC$	I_R			5.0	μA
	$V_R = V_{RRM}$ $T_J = 100^oC$				50	
Thermal resistance	Junction to ambient	$R_{\theta JA}$		30		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		40		pF
Storage temperature		T_{STG}	-65		+175	°C

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
1N5400G	50	35	50	1.10	-55 to +125
1N5401G	100	70	100		
1N5402G	200	140	200		
1N5404G	400	280	400		
1N5406G	600	420	600		
1N5407G	800	560	800		
1N5408G	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@I_F=3.0A

Rating and characteristic curves

Fig.1 - Forward Current Derating Curve

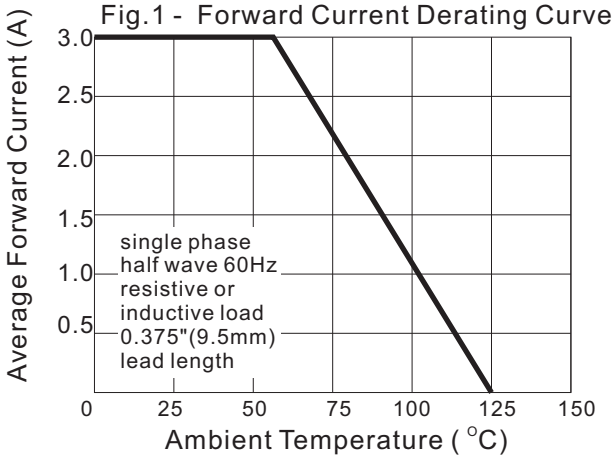


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

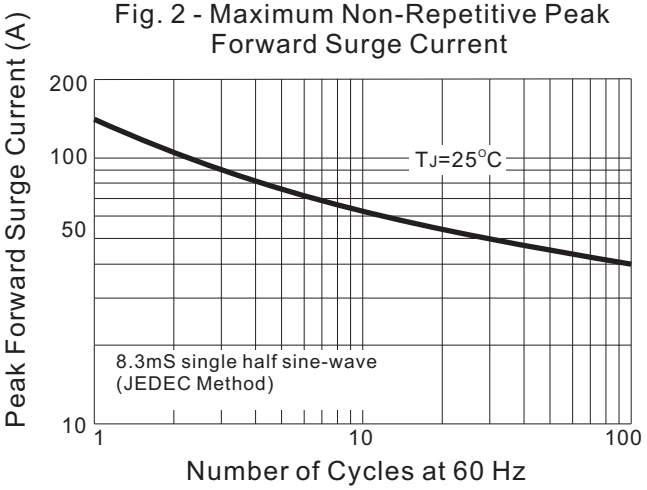


Fig. 3 - Typical Instantaneour Forward Characteristics

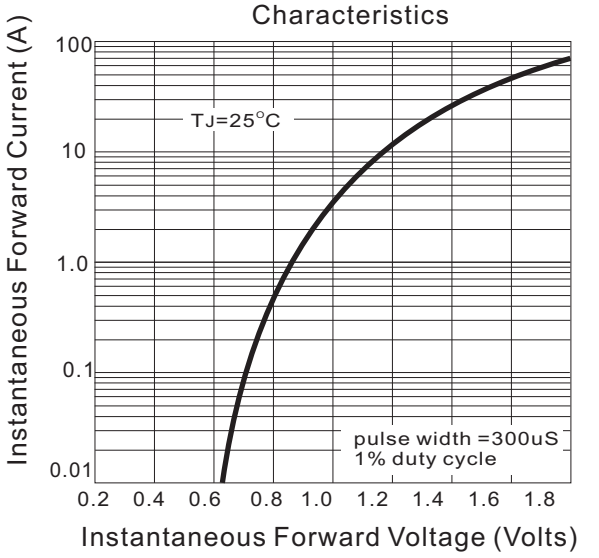


Fig. 4 - Typical Reverse Characteristics

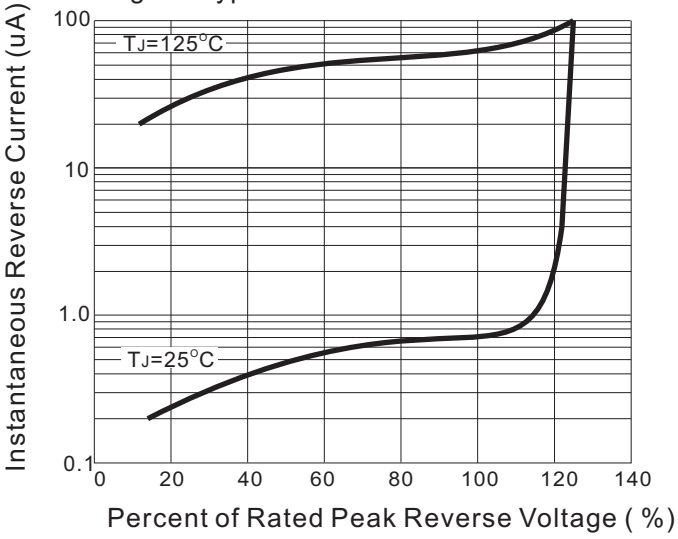


Fig. 5 - Typical Junction Capacitance