GR1005 THRU GR110

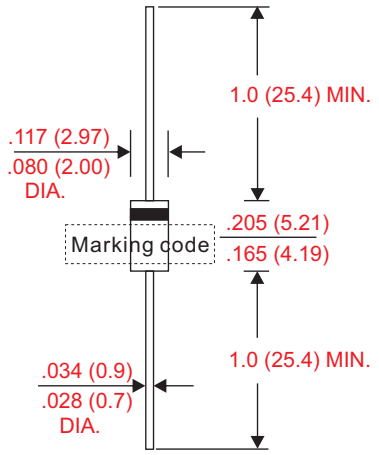
1A Leaded Type General Purpose Rectifiers

■ Features

- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivated chip junction inside.
- Suffix "G" indicates Halogen-free part, ex.GR1005G.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Outline

DO-41(DO-204AL)



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-204AL / DO-41
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity : Color band denotes cathode end
- Weight : Approximated 0.33 gram

■ 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%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	0.375"(9.5mm) lead length at T_A = 75°C	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			30	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			5.0	uA
	V_R = V_{RRM} T_A = 125°C				100	
Thermal resistance	Junction to ambient	$R_{\theta JA}$		50		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		15		pF
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @1.0A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
GR1005	GR1005	50	35	50	1.10	-55 ~ +150
GR101	GR101	100	70	100		
GR102	GR102	200	140	200		
GR104	GR104	400	280	400		
GR106	GR106	600	420	600		
GR108	GR108	800	560	800		
GR110	GR110	1000	700	1000		

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Issued Date : 2010/05/05
Revised Date : 2012/05/31
Revision : C

■ Rating and characteristic curves

Fig.1 - Forward Current Derating Curve

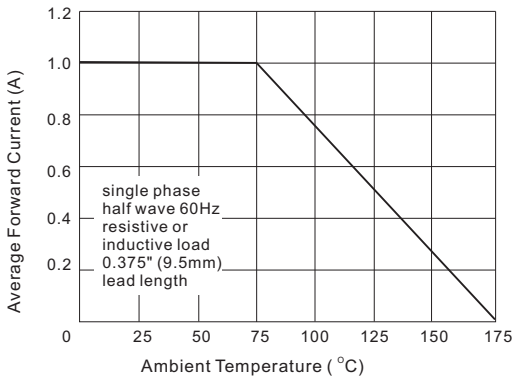


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

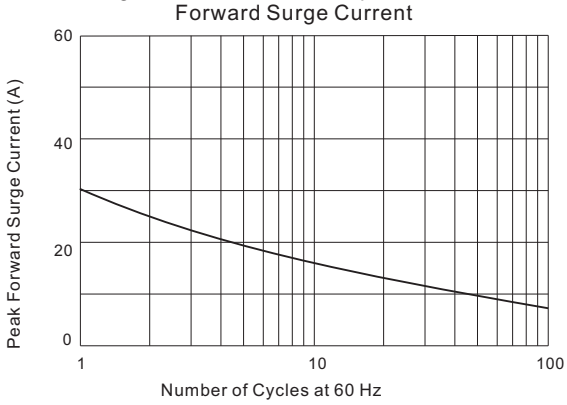


Fig. 3 - Typical Instantaneour Forward Characteristics

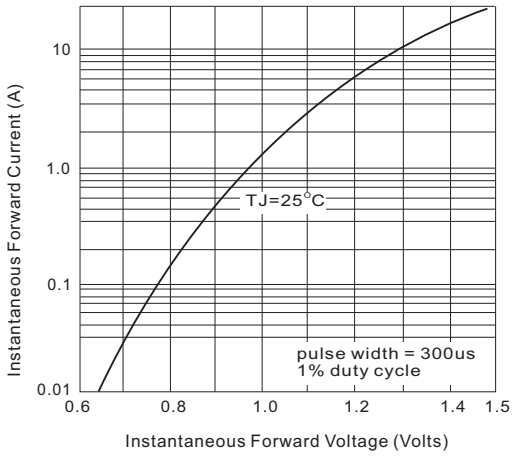


Fig. 4 - Typical Reverse Characteristics

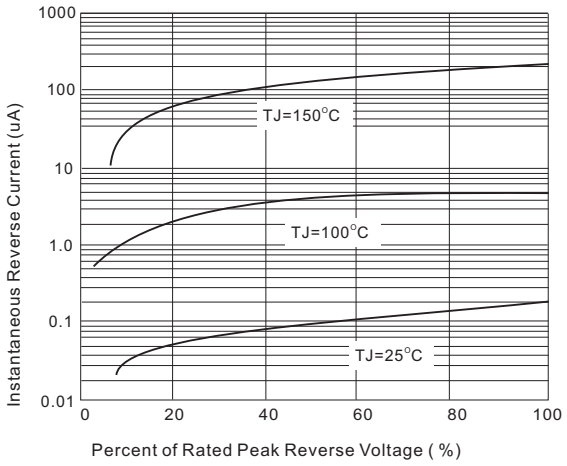
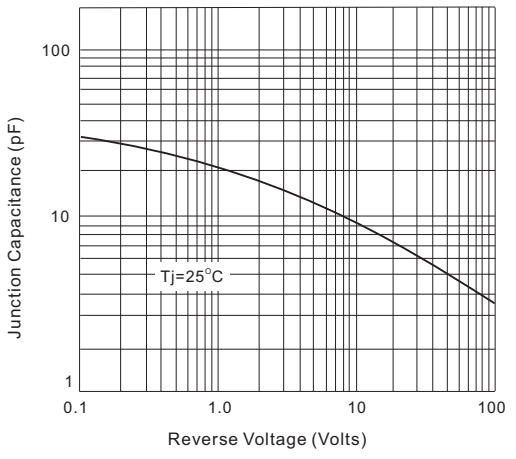


Fig. 5 - Typical Junction Capacitance



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Issued Date : 2010/05/05
Revised Date : 2012/05/31
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