

■ Features

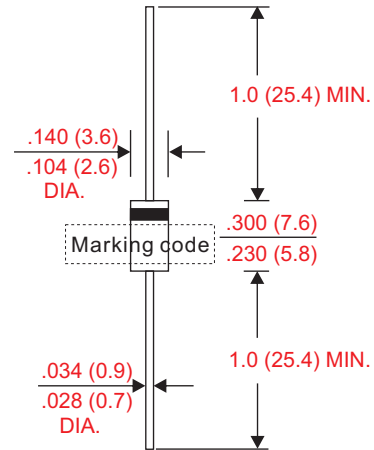
- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivated chip junction inside.
- Suffix "G" indicates Halogen-free part, ex. GR2005G.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-204AC / DO-15
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Weight : Approximated 0.39 gram

■ Outline

DO-15(DO-204AC)



Dimensions in inches and (millimeters)

■ 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		I_O			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			1.0	uA
	$V_R = V_{RRM}$ $T_A = 125^\circ\text{C}$				300	
Thermal resistance	Junction to ambient	$R_{\theta JA}$		53		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		30		pF
Storage temperature		T_{STG}	-50		+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 @2A, $T_A = 25^\circ\text{C}$ V_F (V)	Max. reverse recovery time(1) T_{rr} (us)	Operating temperature T_J (°C)
GR2005	GR2005	50	35	50	1.10	2.5	-50 ~ +150
GR201	GR201	100	70	100			
GR202	GR202	200	140	200			
GR204	GR204	400	280	400			
GR206	GR206	600	420	600			
GR208	GR208	800	560	800			
GR210	GR210	1000	700	1000			

Note : 1. $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

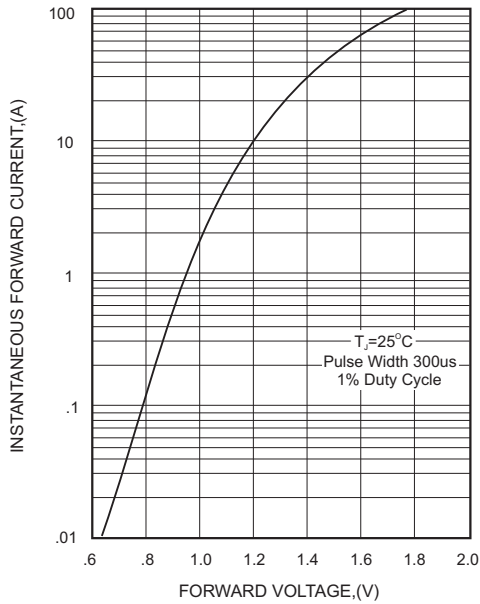


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

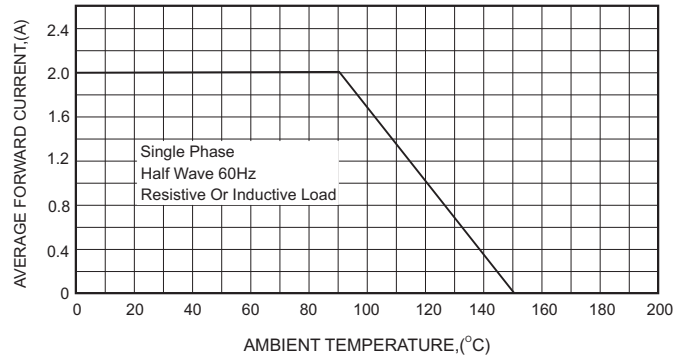


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

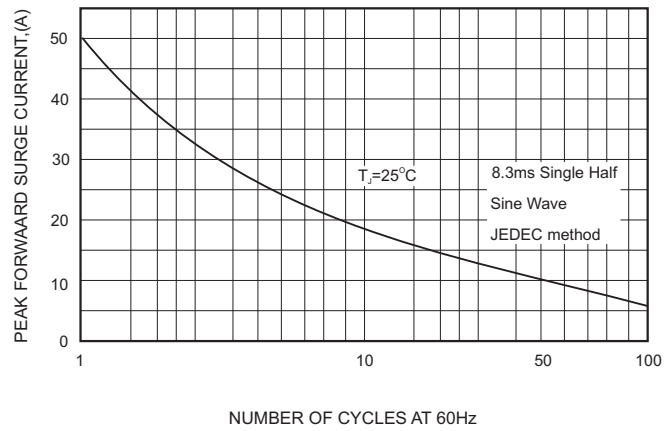


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

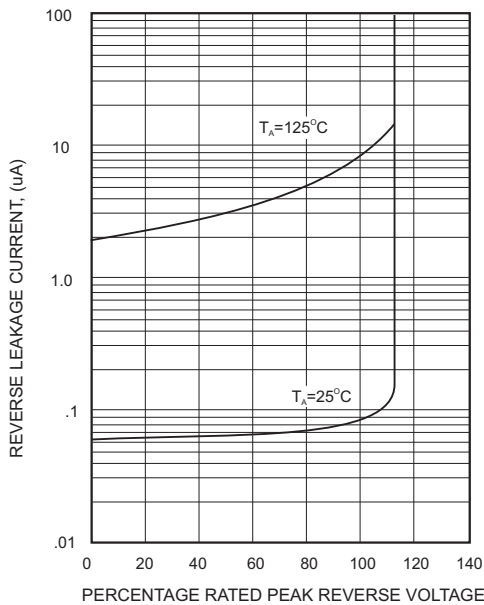
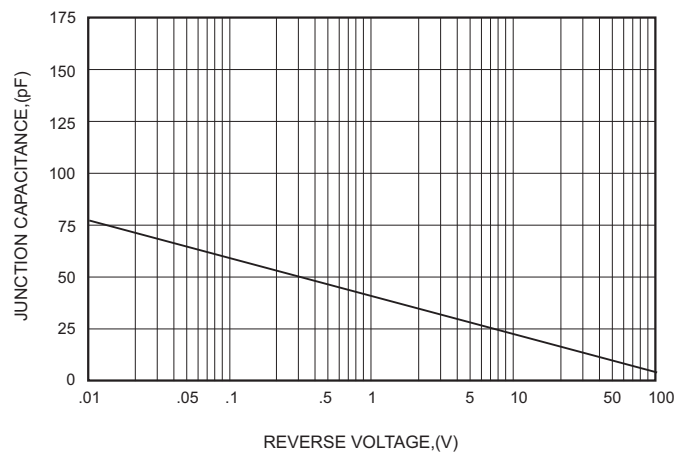


FIG.5-TYPICAL JUNCTION CAPACITANCE



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