

CGR1A7-HF

Reverse Voltage: 1000 V

Forward Current: 1.0 A

RoHS Device

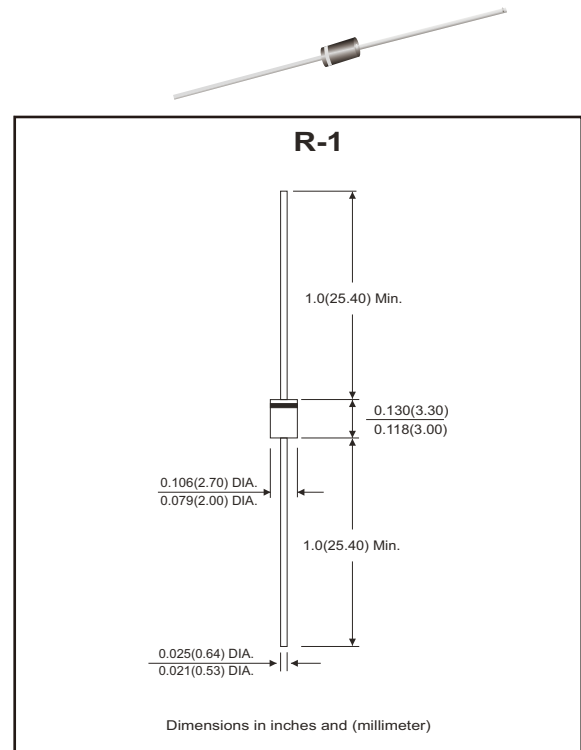
Halogen Free

Features

- Low reverse leakage
- High reliability
- High forward surge current capability

Mechanical data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end.
- Weight: 0.2 grams(approx.)



Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	1000	V
RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	A
Maximum average forward current	I_O	1.0	A
Typical thermal resistance (Junction to Ambient)	$R_{\theta JA}$	95	°C/W
Junction temperature range	T_J	+150	°C
Operating temperature range	T_{op}	-40 to +125	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1.0A$	V_F	-	-	1.1	V
Repetitive peak reverse current	$T_A = 25^\circ C$	I_R	-	-	2.5	μA
	$T_A = 125^\circ C$		-	-	50	
Junction capacitance	$V_R = 4V, f = 1.0MHz$	C_J	-	12	-	pF

Rating and Characteristic Curves (CGR1A7-HF)

Fig.1- Forward Current Derating Curve

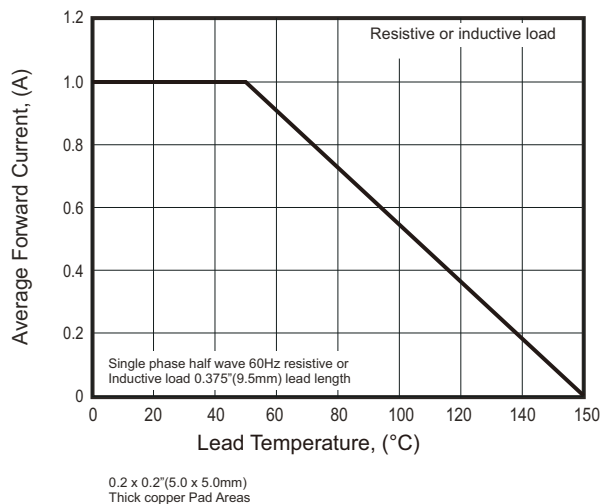


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

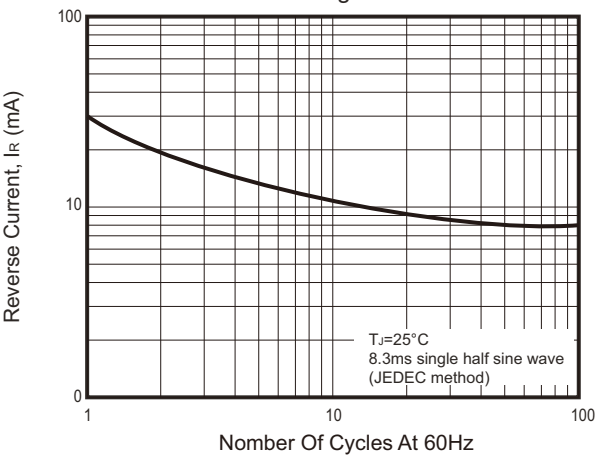


Fig.3 - Typical Reverse Characteristics

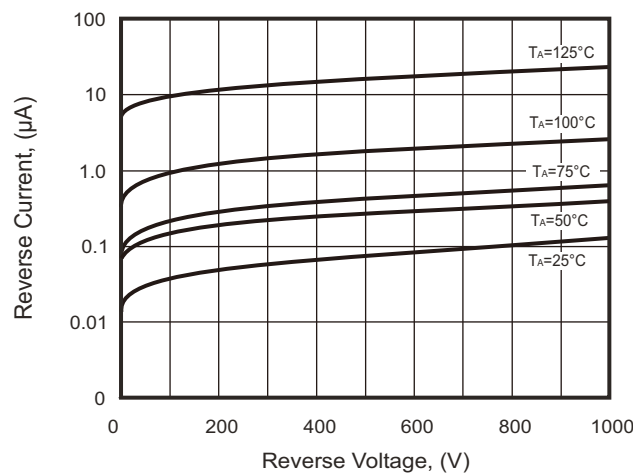
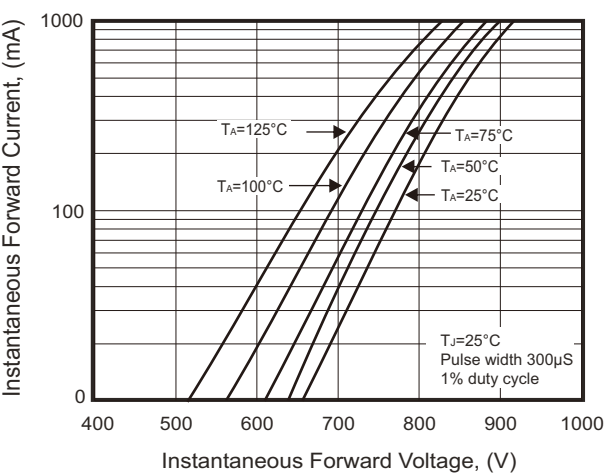
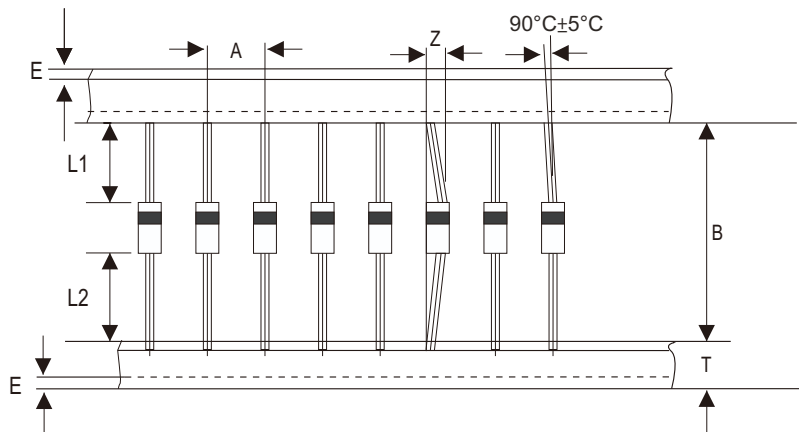


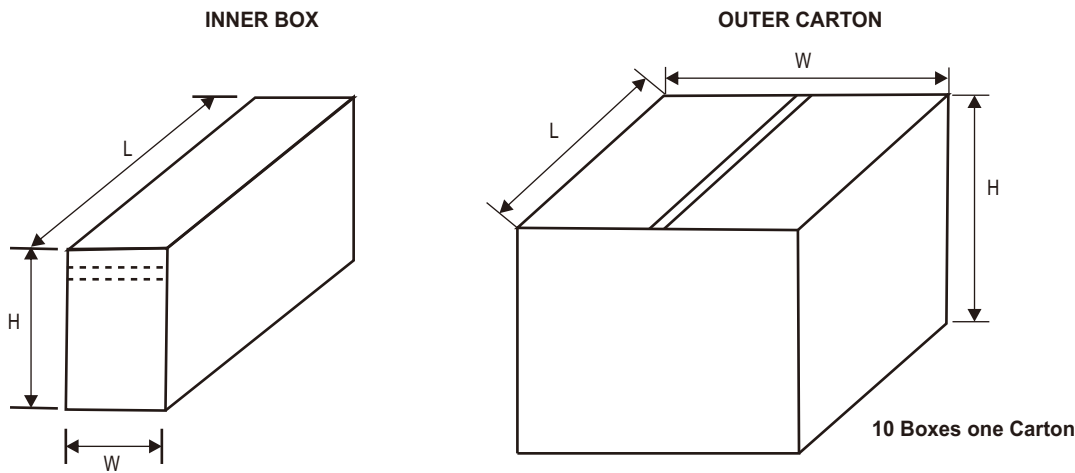
Fig.4 - Typical Forward Characteristics



Taping Specification For Axial Lead Diodes



R-1	SYMBOL	A	B	Z	T	E	L1- L2
	(mm)	5.00 ± 0.50	52.4 ± 1.5	1.2 (max)	6.0 ± 0.4	0.8 (max)	1.0 (max)
	(inch)	0.197 ± 0.020	2.063 ± 0.059	0.047 (max)	0.236 ± 0.016	0.032(max)	0.040 (max)



ITEM	SYMBOL	L	W	H
INNER BOX	(mm)	255 ± 5	71 ± 5	116 ± 5
	(inch)	10.039 ± 0.197	2.795 ± 0.197	4.567 ± 0.197
OUTER CARTON	(mm)	410 ± 5	280 ± 5	265 ± 5
	(inch)	16.142 ± 0.197	11.024 ± 0.197	10.433 ± 0.197

Marking Code

Part Number	Marking Code
CGR1A7-HF	1A7



Standard Packaging

Case Type	BOX		
	BOX (EA)	Box / Carton	CARTON (EA)
R-1	1,200	10	12,000