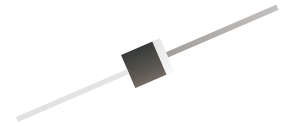


6A005-G Thru. 6A10-G

Reverse Voltage: 50 to 1000 V

Forward Current: 6.0 A

RoHS Device

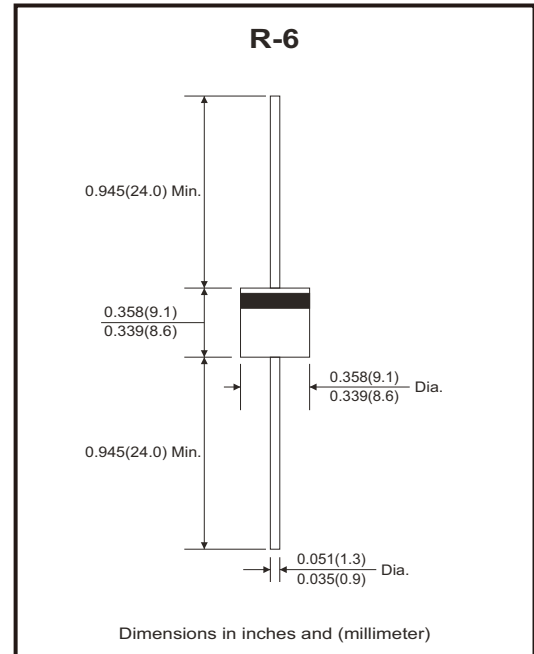


Features

- Open junction chip.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guaranteed 250°C/10 seconds at terminals.

Mechanical data

- Epoxy: UL 94V-0 rate flame retardant
- Case: R-6, molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode.
- Mounting position: Any.



Circuit Diagram



Maximum Ratings and Electrical Characteristics

Ratings 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	Symbol	6A005-G	6A01-G	6A02-G	6A04-G	6A06-G	6A08-G	6A10-G	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	6							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum instantaneous forward voltage at 6.0A	V_F	1.10							V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_R							μA
	$T_A=125^\circ\text{C}$	500							
Typical junction capacitance (Note 1)	C_J	100							pF
Typical thermal resistance	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 ~ +150							$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Rating and Characteristic Curves (6A005-G Thru. 6A10-G)

Fig.1 - Derating Curve Output Rectified Current

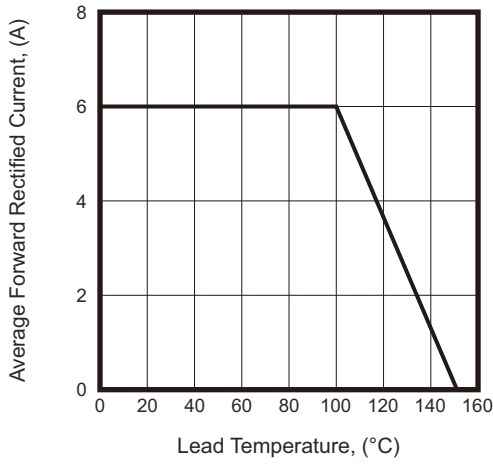


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current Per Leg

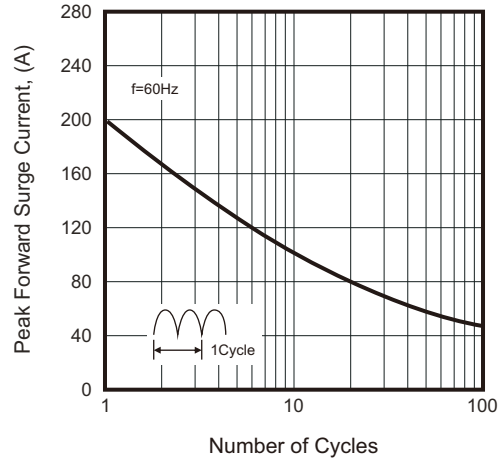


Fig.3 - Typical Forward Voltage Characteristics

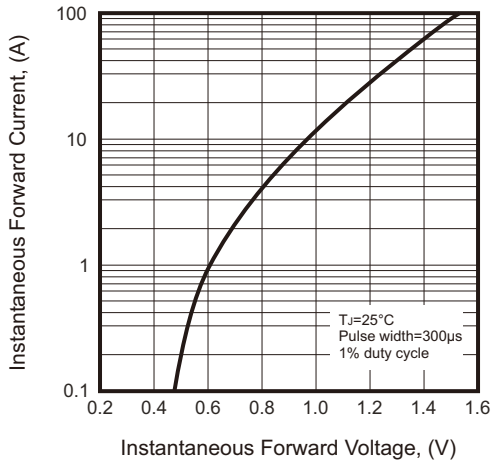
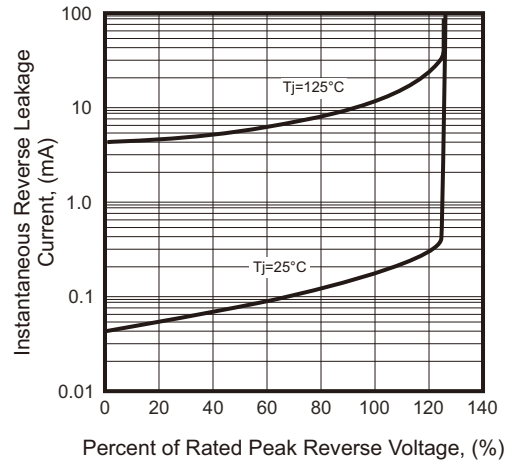
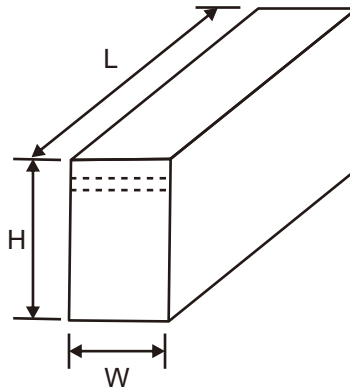
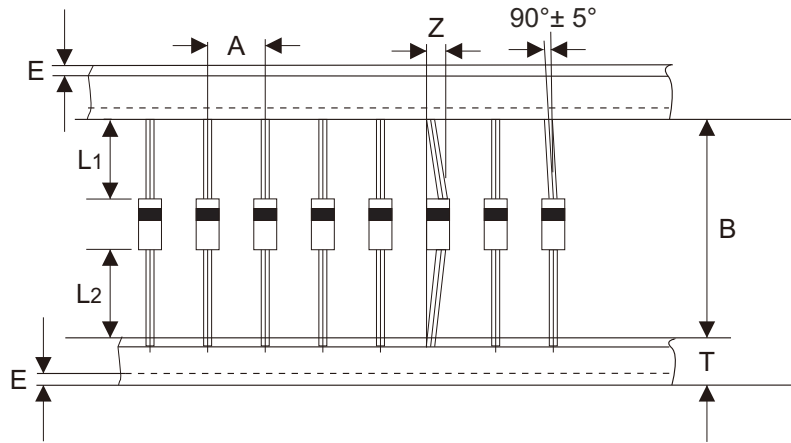


Fig.4 - Typical Reverse Leakage Characteristics



Taping Specification For Axial Lead Diodes



R-6	SYMBOL	A	B	Z	T	E	IL1-L2I
	(mm)	10.00 ± 0.50	$52.40 + 1.50 - 0.40$	1.20 (max)	6.00 ± 0.40	0.80 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	$2.063 + 0.059 - 0.016$	0.047 (max)	0.236 ± 0.016	0.031 (max)	0.039 (max)

R-6	SYMBOL	L	W	H			
	(mm)	255 ± 5.00	75 ± 5.00	150 ± 5.00			
	(inch)	10.039 ± 0.20	2.953 ± 0.197	5.906 ± 0.197			

Company reserves the right to improve product design, functions and reliability without notice.

REV:D

Marking Code

Part Number	Marking Code	Packaging
6A005-G	6A05	AMMO
6A01-G	6A1	AMMO
6A02-G	6A2	AMMO
6A04-G	6A4	AMMO
6A06-G	6A6	AMMO
6A08-G	6A8	AMMO
6A10-G	6A10	AMMO
6A005B-G	6A05	BULK
6A01B-G	6A1	BULK
6A02B-G	6A2	BULK
6A04B-G	6A4	BULK
6A06B-G	6A6	BULK
6A08B-G	6A8	BULK
6A10B-G	6A10	BULK



X / XX = Product type marking code

Note:

(1) Suffix code after part number to specify packaging item.

Packaging	Code
AMMO PACK	NA
BULK PACK	B

Standard Packaging

Case Type	AMMO PACK
	BOX (pcs)
R-6	500

Case Type	BULK PACK
	BOX (pcs)
R-6	200