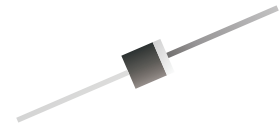


## 6A005-G Thru. 6A10-G

Voltage: 50 to 1000 V

Current: 6.0 A

RoHS Device

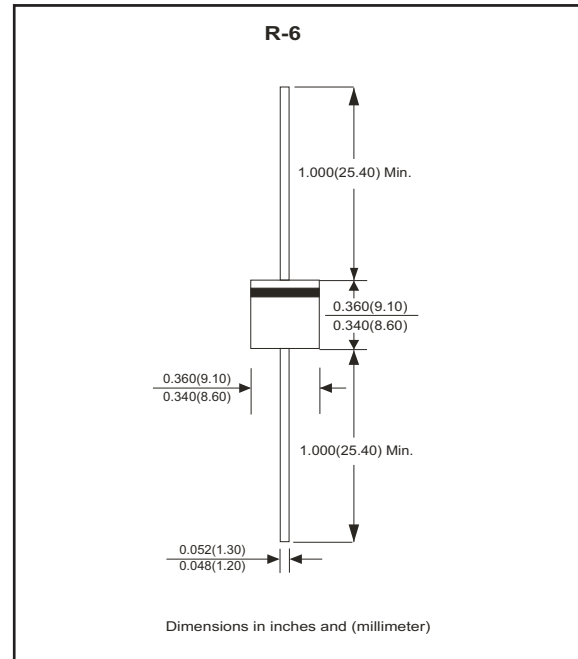


### Features

- Low cost construction.
- Diffused Junction.
- Low forward voltage drop.
- High current capability.

### Mechanical data

- Epoxy: UL 94V-0 rate flame retardant
- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.07ounce, 2.0 grams
- Mounting position: Any



### Electrical Characteristics (at $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Ratings at  $25\text{ }^\circ\text{C}$  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 0.375"(9.5mm) lead length @ $T_A=75\text{ }^\circ\text{C}$	$I_{(AV)}$	6.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	400							A
Maximum forward voltage at 6.0A DC	$V_F$	1.0							V
Maximum reverse current at rated DC blocking voltage	$T_A=25\text{ }^\circ\text{C}$	$I_R$							$\mu\text{A}$
	$T_A=100\text{ }^\circ\text{C}$	$I_R$							
Typical junction capacitance (Note 1)	$C_J$	100							PF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	10							$^\circ\text{C/W}$
Operating temperature range	$T_J$	-55 ~ +125							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 ~ +150							$^\circ\text{C}$

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0Volts.
2. Thermal resistance from junction to ambient .

## RATING AND CHARACTERISTIC CURVES (6A005-G Thru. 6A10-G)

Fig.1- Forward Current Derating Curve

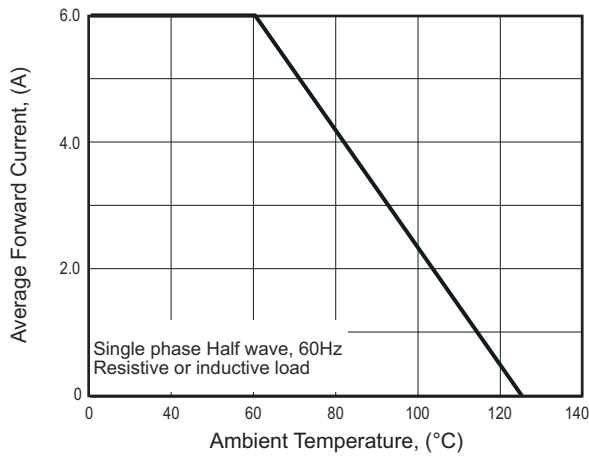


Fig.2- Maximum Non-repetitive Surge Current

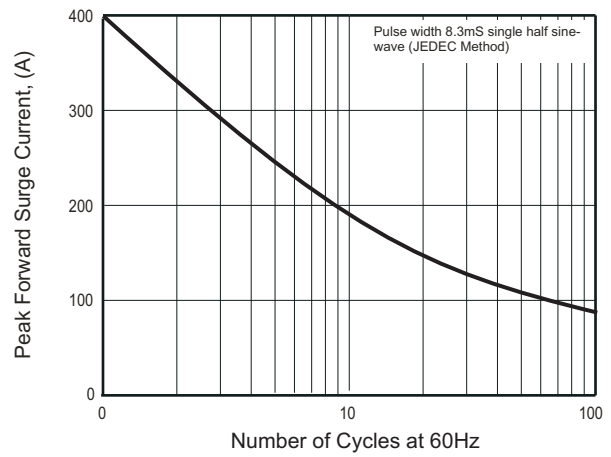


Fig.3- Typical Junction Capacitance

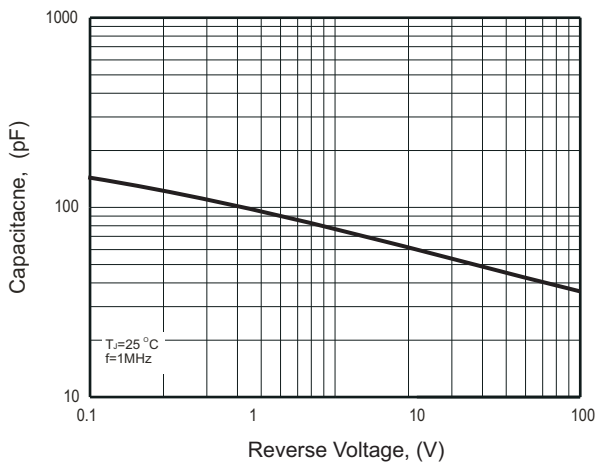
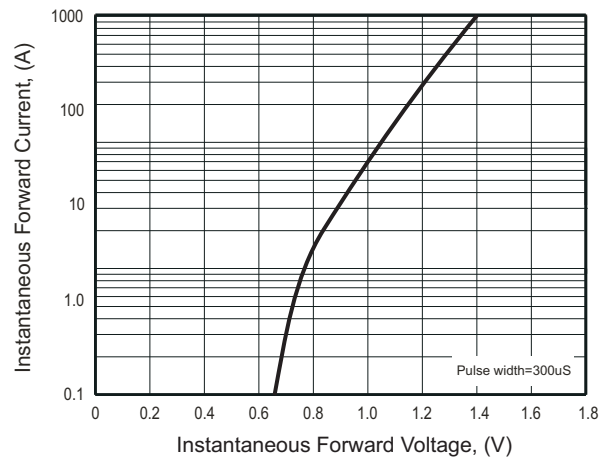


Fig.4- Typical Forward Characteristics



## Marking Code

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



XXX / XXXX = Product type marking code

## Standard Package

Case Type	AMMO PACK		
	Box (EA)	Box / Carton (EA)	CARTON (EA)
R-6	500	10	5,000

Case Type	BULK PACK		
	Box (EA)	Box / Carton (EA)	CARTON (EA)
R-6	250	24	6,000