

## 6A05S-G Thru. 6A10S-G

Reverse Voltage: 50 to 1000 V

Forward Current: 6.0 A

RoHS Device

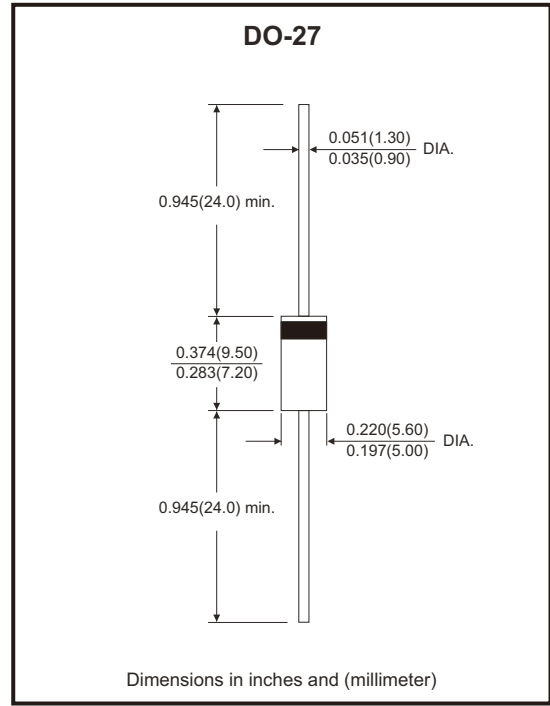


### Features

- 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: DO-27, 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	6A05S-G	6A1S-G	6A2S-G	6A4S-G	6A6S-G	6A8S-G	6A10S-G	Unit
Maximum recurrent 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 @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200							A
Max. instantaneous forward voltage at 6.0A	$V_F$	1.1							V
Max. DC reverse current at rated DC blocking voltage	$I_R$	10 500							$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	100							pF
Typical thermal resistance	$R_{\theta JL}$	40							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 ~ +150							$^\circ\text{C}$

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## Rating and Characteristic Curves (6A05S-G Thru. 6A10S-G)

Fig.1 - Derating Curve Output Rectified Current

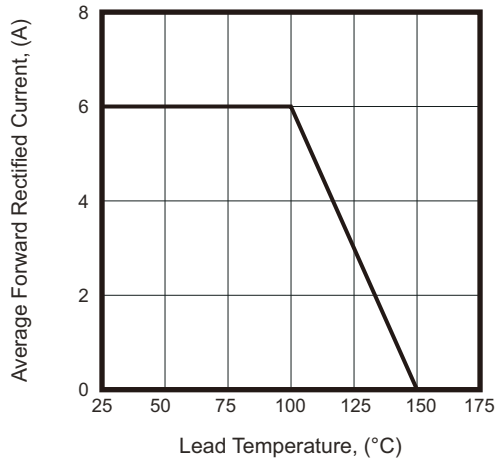


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current Per Leg

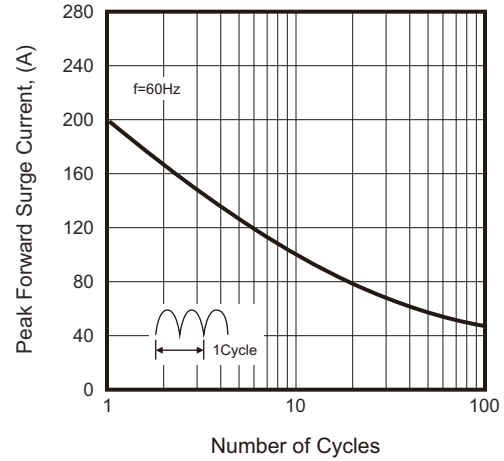


Fig.3 - Typical Forward Voltage Characteristics

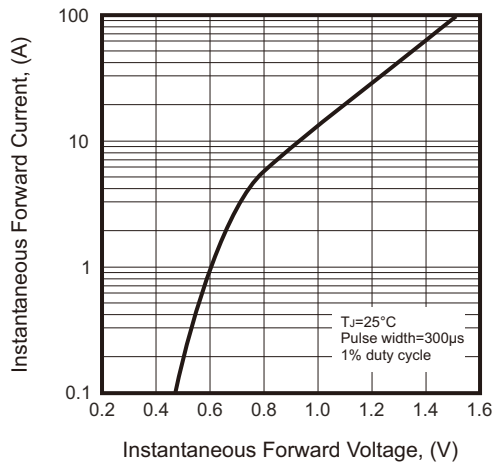
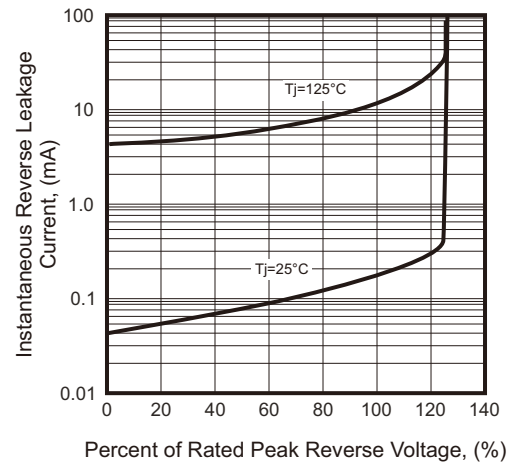


Fig.4 - Typical Reverse Leakage Characteristics



## Marking Code

Part Number	Marking code
6A05S-G	6A05S
6A1S-G	6A1S
6A2S-G	6A2S
6A4S-G	6A4S
6A6S-G	6A6S
6A8S-G	6A8S
6A10S-G	6A10S



X/XX = Product type marking code

## Standard Packaging

Case Type	AMMO PACK
	BOX ( pcs )
DO-27	1,200