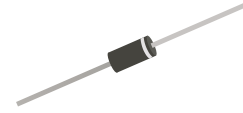


6A05S-G Thru. 6A10S-G

Reverse Voltage: 50 to 1000 V

Forward Current: 6.0 A

RoHS Device

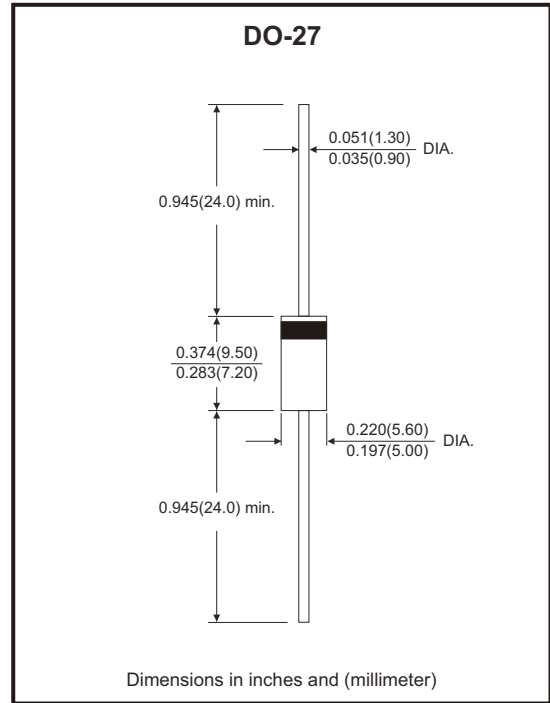


Features

- 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.
- Weight: 0.98 grams approx.
- 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 @ $T_J=100^\circ\text{C}$	$I_{(AV)}$	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 $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	10 500							μA
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.

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

Fig.1 - Derating Curve Output Rectified Current

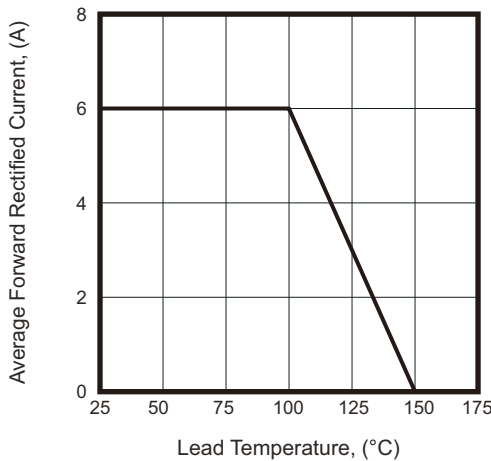


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current Per Leg

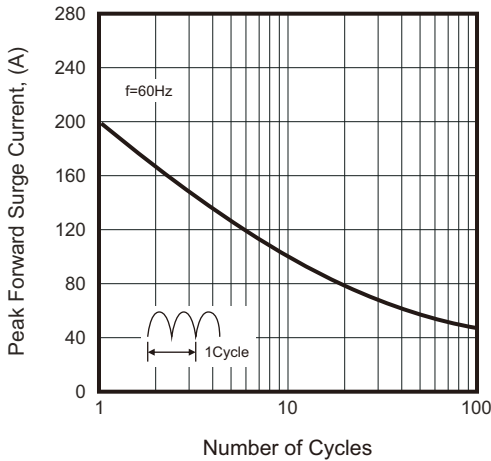


Fig.3 - Typical Forward Voltage Characteristics

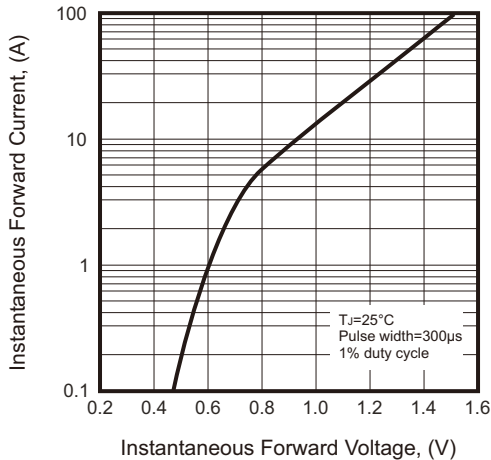
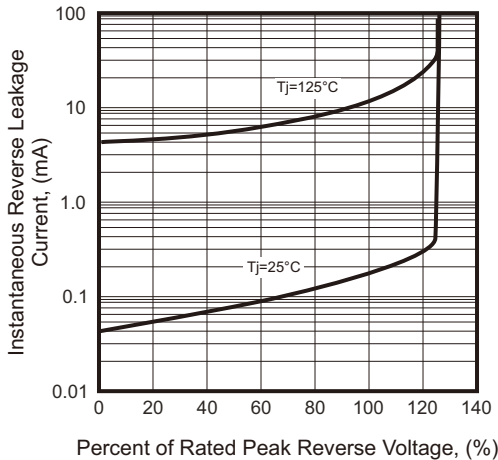
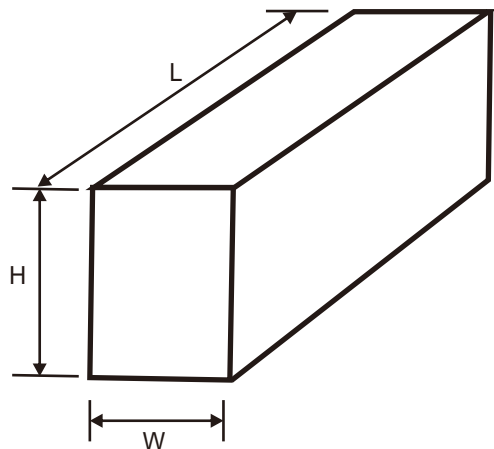
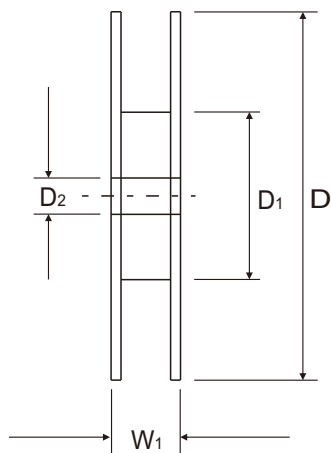
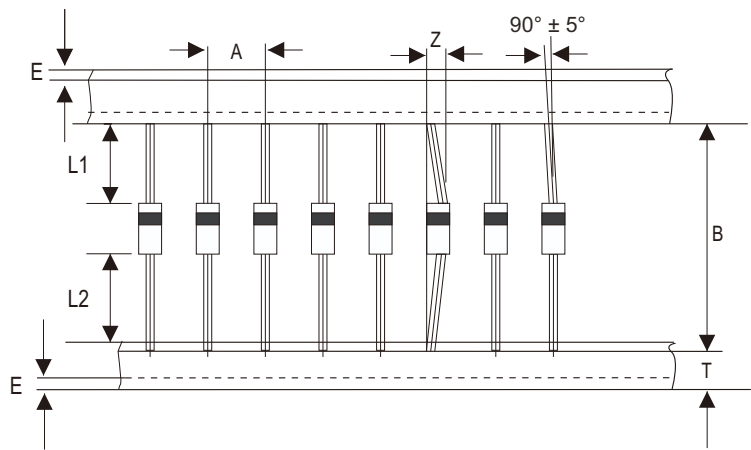


Fig.4 - Typical Reverse Leakage Characteristics



Taping Specification For Axial Lead Diodes



DO-27	SYMBOL	A	B	Z	T	E	L1-L2
	(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)

DO-27	SYMBOL	L	W	H	D	D1	D2	W1
	(mm)	255.00 ± 5.00	75.00 ± 5.00	150.00 ± 5.00	330	85.70 ± 0.30	16.60 ± 0.40	79.00 ± 1.00
	(inch)	10.039 ± 0.197	2.953 ± 0.197	5.906 ± 0.197	12.992	3.374 ± 0.012	0.654 ± 0.016	3.110 ± 0.039

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Marking Code

Part Number	Marking code	Packaging
6A05S-G	6A05S	AMMO
6A1S-G	6A1S	AMMO
6A2S-G	6A2S	AMMO
6A4S-G	6A4S	AMMO
6A6S-G	6A6S	AMMO
6A8S-G	6A8S	AMMO
6A10S-G	6A10S	AMMO
6A05ST-G	6A05S	REEL
6A1ST-G	6A1S	REEL
6A2ST-G	6A2S	REEL
6A4ST-G	6A4S	REEL
6A6ST-G	6A6S	REEL
6A8ST-G	6A8S	REEL
6A10ST-G	6A10S	REEL
6A05SB-G	6A05S	BULK
6A1SB-G	6A1S	BULK
6A2SB-G	6A2S	BULK
6A4SB-G	6A4S	BULK
6A6SB-G	6A6S	BULK
6A8SB-G	6A8S	BULK
6A10SB-G	6A10S	BULK



XX = Product type marking code

Note:

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

Packaging	Code
AMMO PACK	NA
REEL PACK	T
BULK PACK	B

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-27	1,200	13

Case Type	BULK PACK	
	BOX (pcs)	
DO-27	200	

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

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REV:B