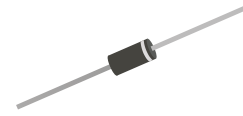


6A05S-G Thru. 6A10S-G

Reverse Voltage: 50 to 1000 V

Forward Current: 6.0 A

RoHS Device

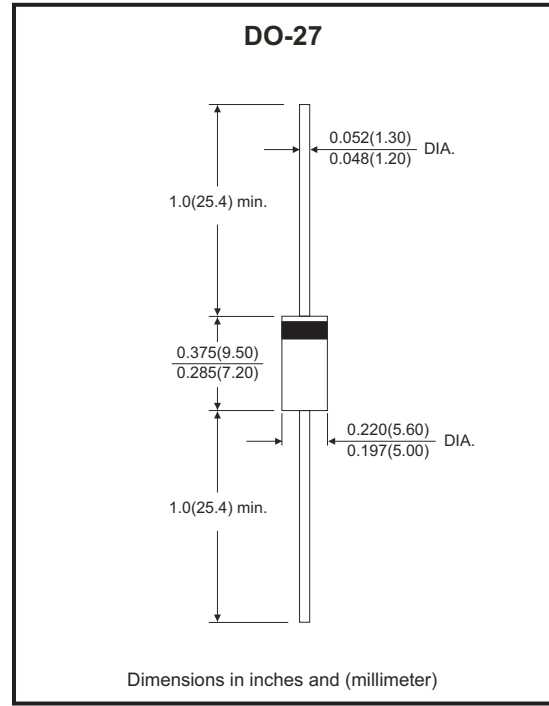


Features

- Diffused junction.
- Low forward voltage drop.
- Low reverse leakage current.
- High current capability.

Mechanical data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: JEDEC DO-27 molded plastic.
- Polarity: Color band denotes cathode.
- Weight: 0.04ounce, 1.1 grams.
- Mounting position: Any.



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 @ $T_A=60^\circ\text{C}$	$I_{(AV)}$	6.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	240							A
Maximum forward voltage at 6.0A DC	V_F	1.0							V
Max. DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$	I_R							μA
	$T_J=100^\circ\text{C}$	I_R							
Typical junction capacitance (Note 1)	C_J	80							pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	2.0							$^\circ\text{C/W}$
Operating temperature range	T_J	-55 ~ +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +175							$^\circ\text{C}$

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to lead / terminal at a distance 1mm from case.

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

REV: A

RATING AND CHARACTERISTIC CURVES (6A05S-G Thru. 6A10S-G)

Fig.1 - Forward Current Derating Curve

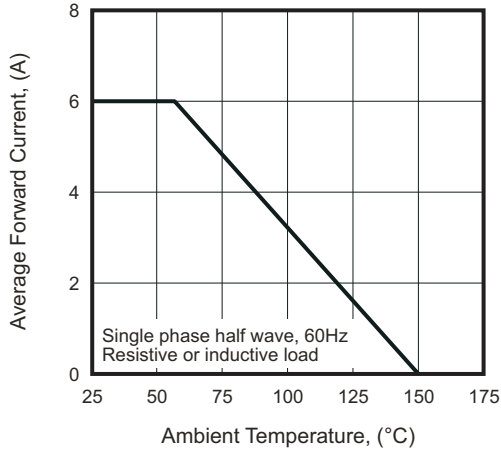


Fig.2 - Max. Non-repetitive Surge Current

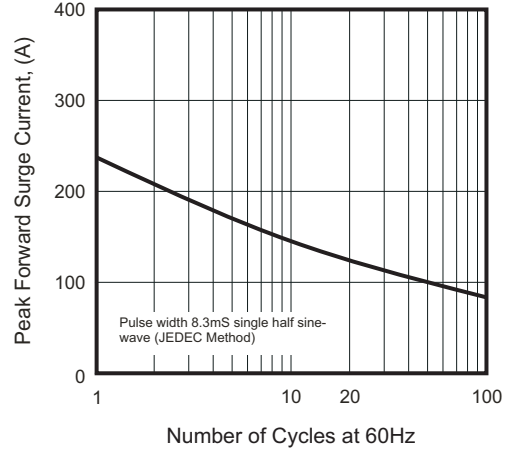


Fig.3 - Typical Junction Capacitance

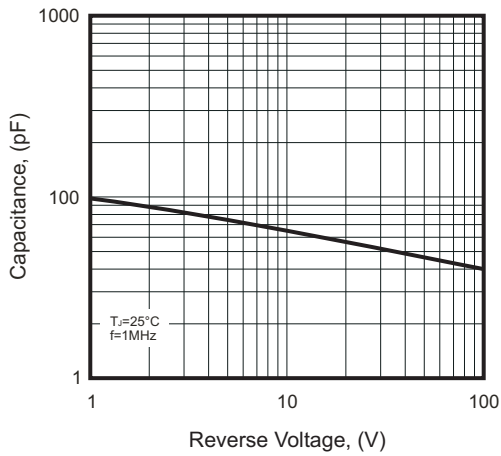
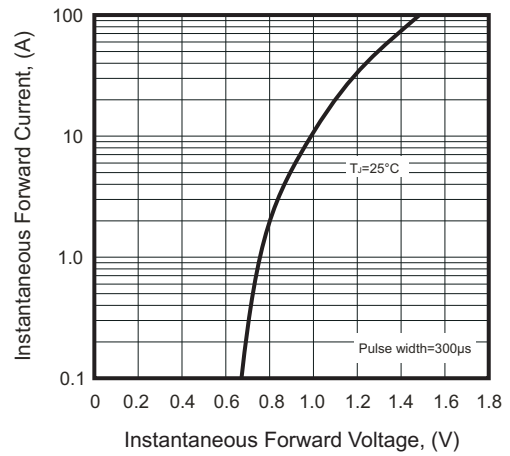
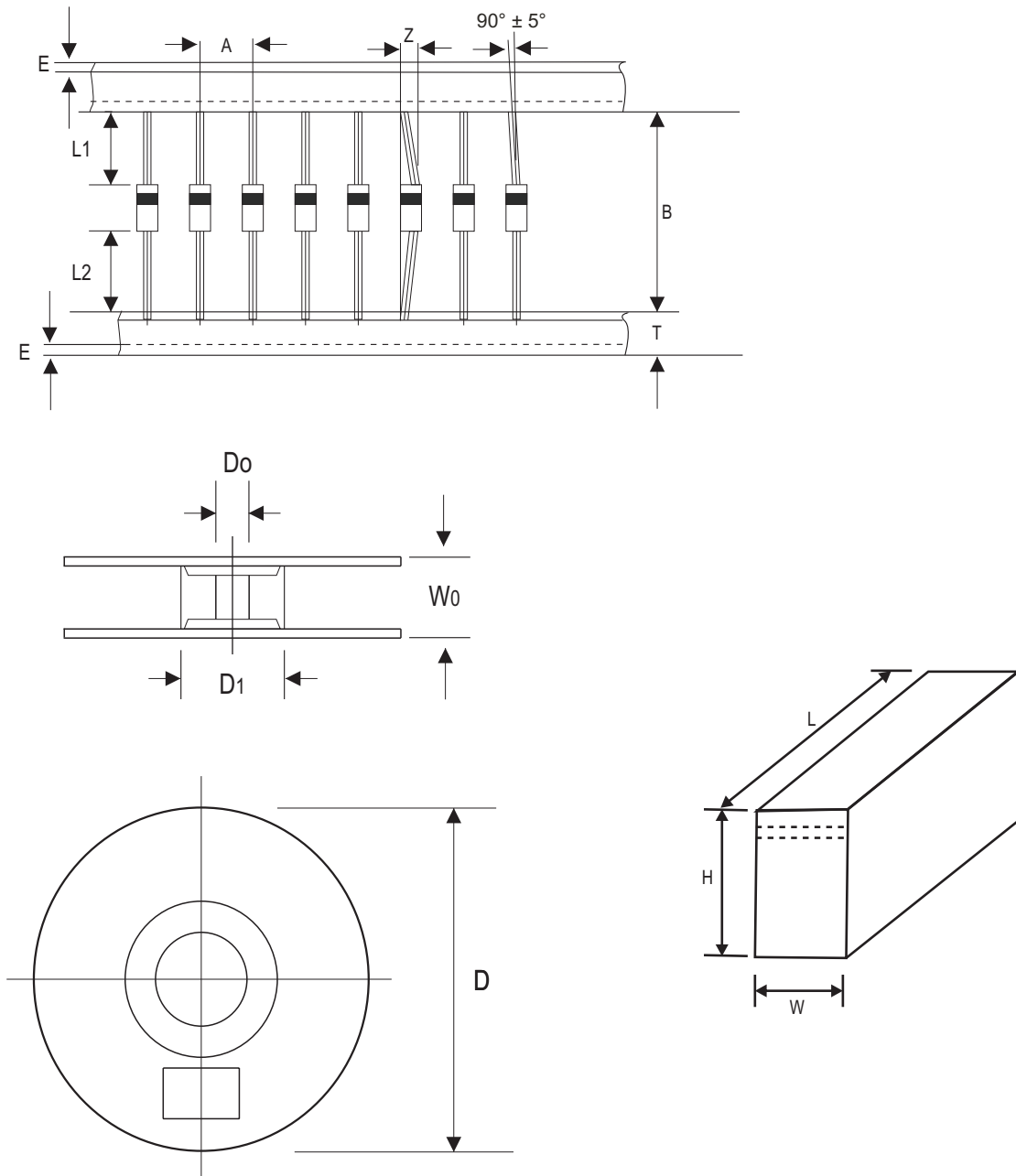


Fig.4 - Typical Forward Characteristics



Taping Specification For Axial Lead Diodes



DO-27 (DO-201AD)	SYMBOL	A	B	Z	T	E	L1	L2
	(mm)	10.00 ± 0.50	52.00 ± 0.50	1.20 (max)	6.00 ± 0.40	0.80 (max)	1.00 (max)	1.00 (max)
	(inch)	0.394 ± 0.020	2.047 ± 0.020	0.047 (max)	0.236 ± 0.016	0.031 (max)	0.039 (max)	0.039 (max)

DO-27 (DO-201AD)	SYMBOL	D1	D0	D	W0	L	W	H
	(mm)	85.70 ± 0.30	16.60 ± 0.40	330.00	79.00 ± 1.00	255.00 ± 5.00	78.00 ± 5.00	95.00 ± 5.00
	(inch)	3.374 ± 0.012	0.654 ± 0.016	12.992	3.110 ± 0.039	10.039 ± 0.197	3.071 ± 0.197	3.740 ± 0.197

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

REV: A

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	AMMO PACK	
	BOX (pcs)	CARTON (pcs)
DO-27 (DO-201AD)	1,200	12,000

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-27 (DO-201AD)	1,200	13

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
DO-27 (DO-201AD)	500	12,000

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