1N5400 THRU 1N5408

General Purpose Silicon Rectifiers

Reverse Voltage: 50 to 1000 Volts
Forward Current: 3.0 Ampere

RoHS Device
Halogen Free

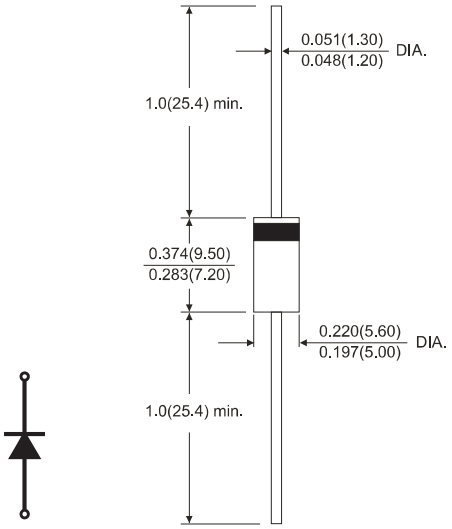
Features

- 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-201AD, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode.
- Mounting position: Any.

DO-201AD(DO-27)



Dimensions in inches and (millimeter)

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	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	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 @TA=75°C		$I_{F(AV)}$	3.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	150							A
Maximum instantaneous forward voltage at 3.0A		V_F	1.10							V
Maximum DC reverse current at rated DC blocking voltage	@TA=25°C	I_R	10.0							μA
	@TA=125°C		500							
Typical junction capacitance (Note 1)		C_J	50							pF
Typical thermal resistance (Note 2)		$R_{\theta JA}$	20							°C/W
Operating junction and storage temperature range		T_J, T_{STG}	-55 to +150							°C

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

Rating and Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

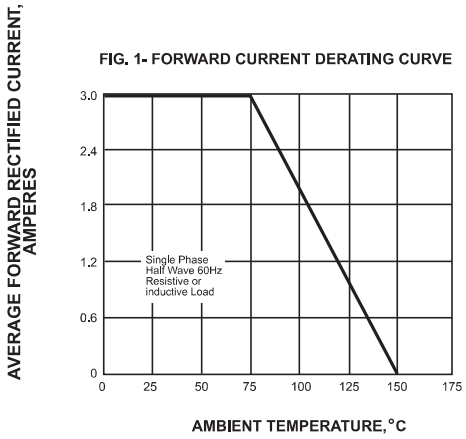


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

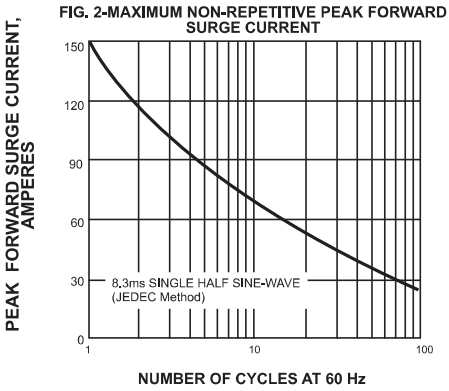


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

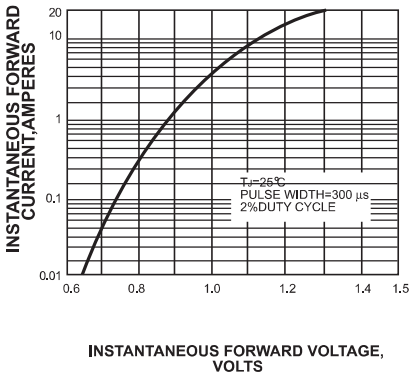


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

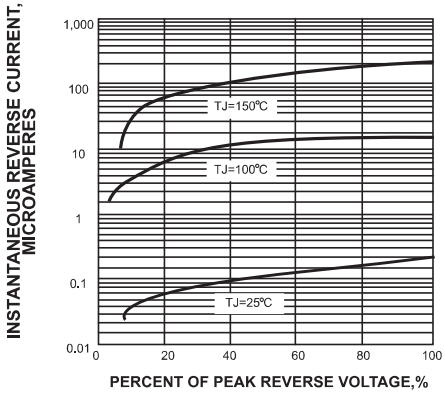


FIG. 5-TYPICAL JUNCTION CAPACITANCE

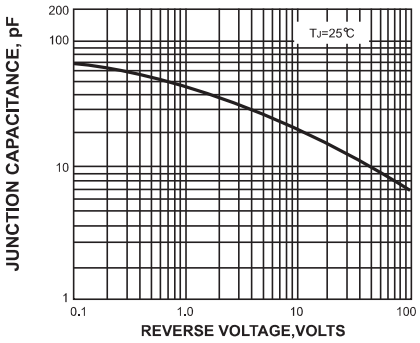
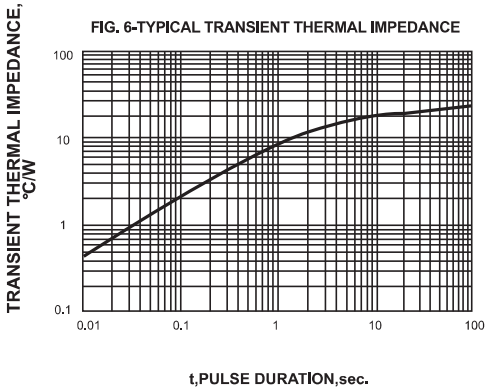


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Marking Code

Part Number	Marking code	Packaging
1N5400	1N5400	AMMO
1N5401	1N5401	
1N5402	1N5402	
1N5404	1N5404	
1N5406	1N5406	
1N5407	1N5407	
1N5408	1N5408	
1N5400T	1N5400	REEL
1N5401T	1N5401	
1N5402T	1N5402	
1N5404T	1N5404	
1N5406T	1N5406	
1N5407T	1N5407	
1N5408T	1N5408	
1N5400B	1N5400	BULK
1N5401B	1N5401	
1N5402B	1N5402	
1N5404B	1N5404	
1N5406B	1N5406	
1N5407B	1N5407	
1N5408B	1N5408	

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

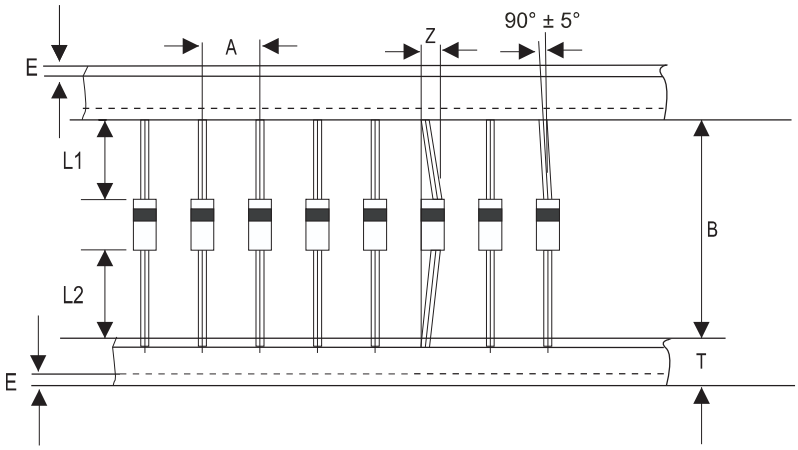
Standard Packaging

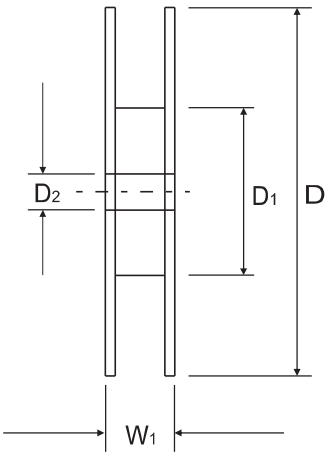
Case Type	AMMO PACK
	BOX (pcs)
DO-201AD	1,250

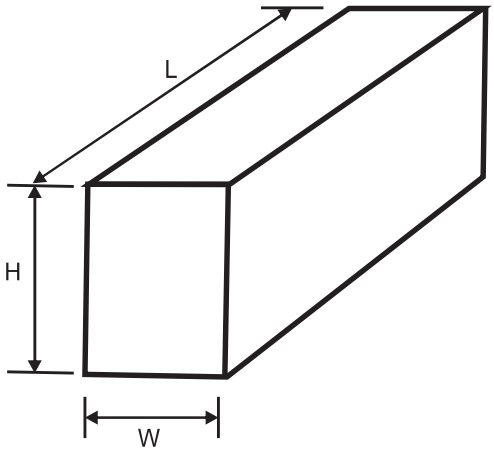
Case Type	BULK PACK
	BOX (pcs)
DO-201AD	200

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

Taping Specification For Axial Lead Diodes







	SYMBOL	A	B	Z	T	E	|L1-L2|
DO-201AD	(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)

	SYMBOL	L	W	H	D	D1	D2	W1
DO-201AD	(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