SENSITRON SEMICONDUCTOR

1N6041A thru 1N6067A

1500W Transient Voltage Suppressor Diodes

TECHNICAL DATA
DATA SHEET 5165 REV. A.1

AVAILABLE AS
1N, JAN, JANTX, JANTXV

1500W Bi-directional TVS Diode

Qualified per MIL-PRF-19500/507

DESCRIPTION:

This hermetically sealed bi-directional TVS diode series is military qualified per MIL-PRF-19500/507 and is targeted for space, commerical and military aircraft, military vehicles, shipboard markets and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Hermetic sealed DO-13 package
- ✓ Parts are hot solder dipped
- ✓ JAN/ JANTX/ JANTXV available per MIL-PRF-19500/507
- ✓ VBR at ±5% tolerance

MAXIMUM RATINGS

- ✓ Operating & Storage Temperature: -65°C to +175°C
- ✓ Junction Temperature: -65°C to +155°C

ELECTRICAL CHARACTERISTICS

SERIES TYPE	MIN BREAKDOWN VOLTAGE $V_{(BR)}$ @ $I_{(BR)}$		WORKING PEAK REVERSE VOLTAGE VRWM	MAXIMUM STANDBY CURRENT I_D	MAX. CLAMP. VOLTAGE VC @ I_{Pp} tp = 1ms	MAX. PEAK PULSE CURRENT tp = 1ms, tr = 10µs I_{PP}	MAX. TEMP. COEFFICIENT
1500W	Vdc	mA dc	Vdc	µAdc	V(pk)	A(pk)	% / °C
1N6041A	11.40	1	10.0	5	16.7	90.0	0.078
1N6042A	12.40	1	11.0	5	18.2	82.0	0.081
1N6043A	14.30	1	12.0	5	21.2	71.0	0.084
1N6044A	15.20	1	13.0	5	22.5	67.0	0.086
1N6045A	17.10	1	15.0	5	25.2	59.5	0.088
1N6046A	19.00	1	17.0	5	27.7	54.0	0.090
1N6047A	20.90	1	18.0	5	30.6	49.0	0.092
1N6048A	22.80	1	20.0	5	33.2	45.0	0.094
1N6049A	25.70	1	22.0	5	37.5	40.0	0.096
1N6050A	28.50	1	25.0	5	41.4	36.0	0.097
1N6051A	31.40	1	28.0	5	45.7	33.0	0.098
1N6052A	34.20	1	30.0	5	49.9	30.0	0.098
1N6053A	37.10	1	33.0	5	53.9	28.0	0.100
1N6054A	40.90	1	36.0	5	59.3	25.3	0.101
1N6055A	44.70	1	40.0	5	64.8	23.2	0.101
1N6056A	48.50	1	43.0	5	70.1	21.4	0.102

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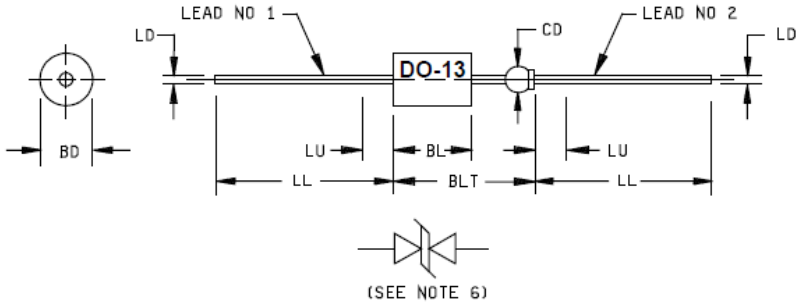
1500W	Vdc	mA dc	Vdc	µAdc	V(pk)	A(pk)	% / °C
1N6057A	53.20	1	47.0	5	77.0	19.5	0.103
1N6058A	58.90	1	53.0	5	85.0	17.7	0.104
1N6059A	64.60	1	58.0	5	92.0	16.3	0.104
1N6060A	71.30	1	64.0	5	103.0	14.6	0.105
1N6061A	77.90	1	70.0	5	113.0	13.3	0.105
1N6062A	86.50	1	75.0	5	125.0	12.0	0.106
1N6063A	95.00	1	82.0	5	137.0	11.0	0.106
1N6064A	105.00	1	94.0	5	152.0	9.9	0.107
1N6065A	114.00	1	100.0	5	168.0	8.9	0.107
1N6066A	124.00	1	110.0	5	182.0	8.2	0.107
1N6067A	143.00	1	128.0	5	213.0	7.0	0.108

PACKAGE DIMENSIONS (inches/mm)



Symbol	Dimensions				Notes 1, 2
	Inches		Millimeters		
	Min	Max	Min	Max	
BD	.215	.235	5.46	5.97	
BL	.293	.357	7.44	9.07	3
BLT		.570		14.48	
CD	.045	.100	1.14	2.54	5
LD	.025	.035	0.64	0.89	
LL	1.000	1.625	25.40	41.28	
LU		.188		4.78	4

NOTES:
1. Dimensions are in inches.
2. Millimeter equivalents are given for general information only.
3. The major diameter is essentially constant along its length.
4. Within this zone, diameter may vary to allow for lead finishes and irregularities.
5. Dimension to allow for pinch or seal deformation anywhere along tubulation.
6. Symbol for bidirectional transient suppressor.
7. Lead 1 shall be electrically connected to the case.
8. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

PKG: DO-13

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PART ORDERING INFORMATION

The following part numbers can be screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

Sensitron Screening Level	Part Number-- Leaded Package *(example for 1N6041A)*
1N	1N6041A
JAN	JAN1N6041A
JANTX	JANTX1N6041A
JANTXV	JANTXV1N6041A