

FEATURES:

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

MAXIMUM RATINGS

Rating	Value
Operating and storage temperature range	-65 to +150°C
DC Power Dissipation	5 Watts
Power Derating	40mW/°C over 25°C
Forward Voltage @ 1.0 Amp	1.2 Volts max
Steady state power T _L ≤ 25°C 3/8" from body	5 W
Thermal resistance	25°C/W
Solder temperature	260°C for 10 seconds maximum

ELECTRICAL CHARACTERISTICS

Type	Nominal Zener Voltage V _Z @ I _{ZT} Volts	Zener Test Current I _{ZT} mA	Maximum Zener Impedance Z _{ZT} @ I _{ZT} Ohms (A & B only)	A, B, C Maximum Knee Impedance Z _{ZK} @ 1.0 mA Ohms	Maximum Reverse Leakage Current I _R @ V _R µA	I _R Test voltage Non & A Suffix Volts V _R	I _R Test voltage B, C, D Suffix Volts V _R	B, C, D Maximum Zener Current I _{ZM} mA	Maximum Surge Current I _{ZSM} A
1N5338A	5.1	240	1.5	400	1.0	1.0	1.0	930	14.4
1N5339A	5.6	220	1.0	400	1.0	2.0	2.0	865	13.4
1N5340A	6.0	200	1.0	300	1.0	3.0	3.0	790	12.7
1N5341A	6.2	200	1.0	200	1.0	3.0	3.0	765	12.4
1N5342A	6.8	175	1.0	200	10	4.9	5.2	700	11.5
1N5343A	7.5	175	1.5	200	10	5.4	5.7	630	10.7
1N5344A	8.2	150	1.5	200	10	5.9	6.2	580	10.0
1N5345A	8.7	150	2.0	200	10	6.3	6.6	545	9.5
1N5346A	9.1	150	2.0	150	7.5	6.6	6.9	520	9.2
1N5347A	10	125	2.0	125	5.0	7.2	7.6	475	8.6
1N5348A	11	125	2.5	125	5.0	8.0	8.4	430	8.0
1N5349A	12	100	2.5	125	2.0	8.6	9.1	395	7.5
1N5350A	13	100	2.5	100	1.0	9.4	9.9	365	7.0
1N5351A	14	100	2.5	75	1.0	10.1	10.6	340	6.7
1N5352A	15	75	2.5	75	1.0	10.8	11.5	315	6.3
1N5353A	16	75	2.5	75	1.0	11.5	12.2	295	6.0
1N5354A	17	70	2.5	75	0.5	12.2	12.9	280	5.8
1N5355A	18	70	2.5	75	0.5	13.0	13.7	264	5.5
1N5356A	19	70	3.0	75	0.5	13.7	14.4	250	5.3
1N5357A	20	65	3.0	75	0.5	14.4	15.2	237	5.1
1N5358A	22	50	3.5	75	0.5	15.8	16.7	216	4.7
1N5359A	24	50	3.5	100	0.5	17.3	18.2	198	4.4
1N5360A	25	50	4.0	110	0.5	18.0	19.0	190	4.3

ELECTRICAL CHARACTERISTICS

Type	Nominal Zener Voltage $V_Z @ I_{ZT}$ Volts	Zener Test Current I_{ZT} mA	Maximum Zener Impedance $Z_{ZT} @ I_{ZT}$ Ohms	A,B,C Maximum Knee Impedance $Z_{ZK} @ 1.0$ mA Ohms	Maximum Reverse Leakage Current $I_R @ V_R$ μA	I_R Test voltage Non & A Suffix Volts V_R	I_R Test voltage B,C,D Suffix Volts V_R	B,C,D Maximum Zener Current I_{ZM} mA	Maximum Surge Current I_{ZSM} A
1N5361A	27	50	5.0	120	0.5	19.4	20.6	176	4.1
1N5362A	28	50	6.0	130	0.5	20.1	21.2	170	3.9
1N5363A	30	40	8.0	140	0.5	21.6	22.8	158	3.7
1N5364A	33	40	10	150	0.5	23.8	25.1	144	3.5
1N5365A	36	30	11	160	0.5	25.9	27.4	132	3.3
1N5366A	39	30	14	170	0.5	28.1	29.7	122	3.1
1N5367A	43	30	20	180	0.5	31.0	32.7	110	2.8
1N5368A	47	25	25	210	0.5	33.8	35.8	100	2.7
1N5369A	51	25	27	230	0.5	36.7	38.8	93	2.5
1N5370A	56	20	35	280	0.5	40.3	42.6	86	2.3
1N5371A	60	20	40	350	0.5	43.0	45.5	79	2.2
1N5372A	62	20	42	400	0.5	44.6	47.1	76	2.1
1N5373A	68	20	44	500	0.5	49.0	51.7	70	2.0
1N5374A	75	20	45	620	0.5	54.0	56.0	63	1.9
1N5375A	82	15	65	720	0.5	59.0	62.2	58	1.8
1N5376A	87	15	75	760	0.5	63.0	66.0	54.5	1.7
1N5377A	91	15	75	760	0.5	63.5	69.2	52.5	1.6
1N5378A	100	12	90	800	0.5	72.0	76.0	47.5	1.5
1N5379A	110	12	125	1000	0.5	79.2	83.6	43.0	1.4
1N5380A	120	10	170	1150	0.5	84.6	91.2	39.5	1.3
1N5381A	130	10	190	1250	0.5	93.6	98.8	36.6	1.2
1N5382A	140	8	230	1500	0.5	101	106	34.0	1.2
1N5383A	150	8	330	1500	0.5	108	114	31.6	1.1
1N5384A	160	8	350	1650	0.5	115	122	29.4	1.1
1N5385A	170	8	380	1750	0.5	122	129	28.0	1.0
1N5386A	180	5	430	1750	0.5	130	137	26.4	1.0
1N5387A	190	5	450	1850	0.5	137	144	25.0	0.9
1N5388A	200	5	480	1850	0.5	144	152	23.6	0.8

Notes:

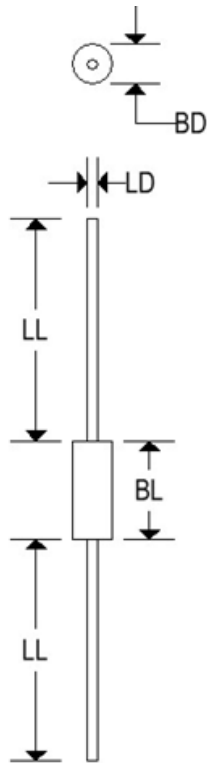
1. "B" suffix indicates a $\pm 5\%$ tolerance. "A" suffix indicates a $\pm 10\%$ tolerance. "C" suffix indicates a $\pm 2\%$ tolerance and a "D" suffix indicates a $\pm 1\%$ tolerance.

1N5338A-1N5388A

Zener Diodes
5 Watt

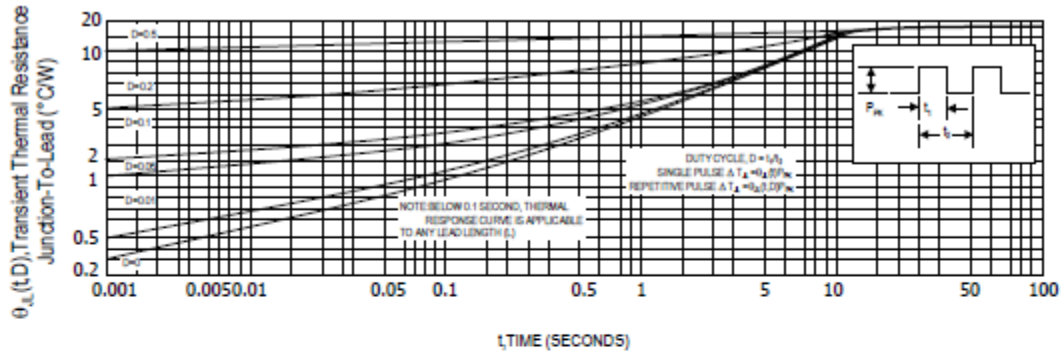
MECHANICAL CHARACTERISTICS

Case	DO-15 Plastic
Marking	Alpha-Numeric
Polarity	Cathode Band

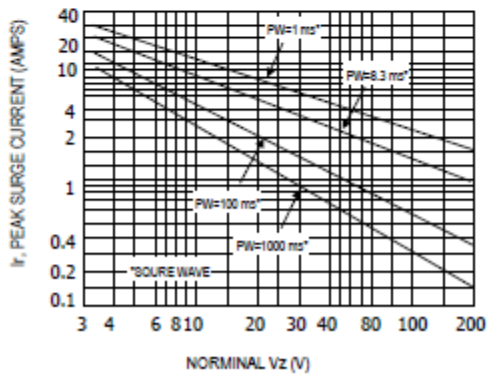


	DO-15			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.102	0.142	2.600	3.600
BL	0.230	0.300	5.800	7.600
LD	0.028	0.034	0.710	0.860
LL	1.000	-	25.400	-

Typical Thermal Response L, Lead Length = 3/8 Inch



Maximum Non-Repetitive Surg Current versus Nominal Zener Voltage



Peak Surg Current versus Pulse Width

