

FEATURES

- Available as High Reliability, JANTX level by adding “-HR” suffix.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding “-PBF” suffix.
- Available as surface mount by adding “UR” suffix.

MAXIMUM RATINGS

Characteristics	Values
Junction and storage temperatures	-65 to +175°C
DC power dissipation	500mW @ $T_L = 25^\circ\text{C}$ and maximum current I_{ZM} of 50 mA. For optimum voltage temperature stability, $I_Z = 7.5\text{mA}$ (less than 75 mW in dissipated power)
Solder temperatures	260°C for 10 s (maximum)

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Part number	Zener voltage $V_Z @ I_{ZT}$	Zener test current I_{ZT}	Maximum zener impedance $Z_{ZT} @ I_{ZT}$	Voltage temperature stability ΔV_{ZT} maximum	Temperature range	Effective temperature coefficient α_{VZ}
	Notes 1 & 4		Note 2	Notes 3 & 4		
Notes 1	Volts	mA	Ohms	mV	°C	%/°C
1N935	8.55-9.45	7.5	20	67	0 to +75	0.01
1N935A	8.55-9.45	7.5	20	139	-55 to +100	0.01
1N935B	8.55-9.45	7.5	20	184	-55 to +150	0.01
1N936	8.55-9.45	7.5	20	33	0 to +75	0.005
1N936A	8.55-9.45	7.5	20	69	-55 to +100	0.005
1N936B	8.55-9.45	7.5	20	92	-55 to +150	0.005
1N937	8.55-9.45	7.5	20	13	0 to +75	0.002
1N937A	8.55-9.45	7.5	20	27	-55 to +100	0.002
1N937B	8.55-9.45	7.5	20	37	-55 to +150	0.002
1N938	8.55-9.45	7.5	20	6	0 to +75	0.001
1N938A	8.55-9.45	7.5	20	13	-55 to +100	0.001
1N938B	8.55-9.45	7.5	20	18	-55 to +150	0.001
1N939	8.55-9.45	7.5	20	3	0 to +75	0.0005
1N939A	8.55-9.45	7.5	20	7	-55 to +100	0.0005
1N939B	8.55-9.45	7.5	20	9	-55 to +150	0.0005
1N940	8.55-9.45	7.5	20	1.3	0 to +75	0.0002
1N940A	8.55-9.45	7.5	20	2.7	-55 to +100	0.0002
1N940B	8.55-9.45	7.5	20	3.7	-55 to +150	0.0002

Note 1. For devices with tighter tolerances, use a nominal voltage of 9.2V and add a hyphenated suffix to the part number for desired tolerance at the end of the part number, ie. -2%

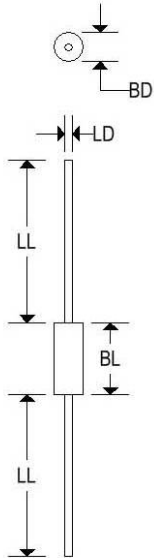
Note 2. Measured by superimposing 0.75mA ac rms on 7.5 mA dc @ 25°C

Note 3. The maximum allowable change observed over the entire temperature range, i.e. the diode voltage will not exceed the specified mV change at any discrete temperature between the established limits

Note 4. Voltage measurements to be performed 15 seconds after application of dc current

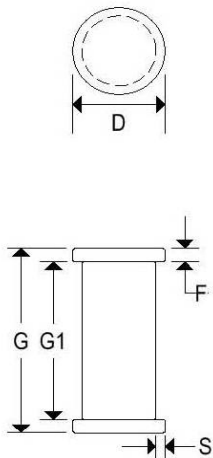
MECHANICAL CHARACTERISTICS

Case	DO-35 hermetically sealed glass
Marking	Body painted, alpha numeric
Polarity	Cathode band

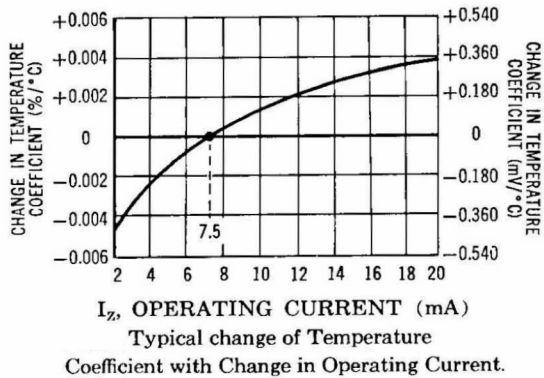
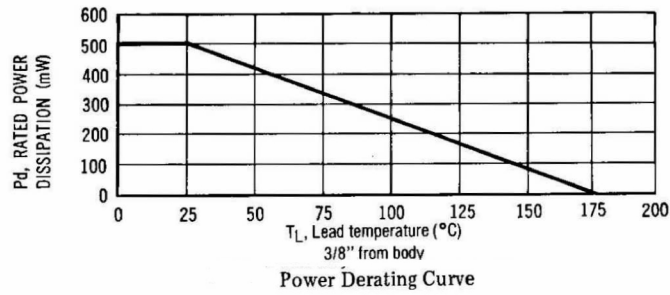


	DO-35			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100

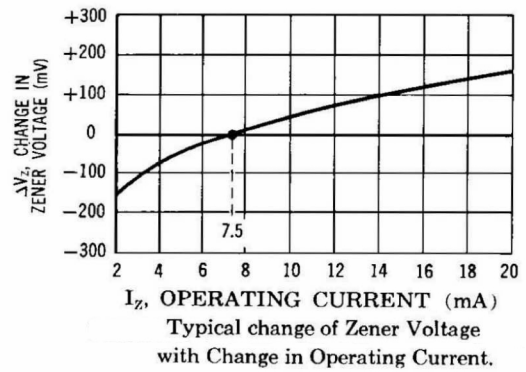
Case	SOD-80
Marking	Alpha numeric
Polarity	Cathode band



	SOD-80			
	Inches		Millimeters	
	Min	Max	Min	Max
D	0.063	0.067	1.600	1.700
F	0.016	0.022	0.410	0.550
G	0.130	0.146	3.300	3.700
G1	0.100 REF		2.540 REF	
S	0.001	-	0.030	-



Typical change of Temperature Coefficient with Change in Operating Current.



Typical change of Zener Voltage with Change in Operating Current.