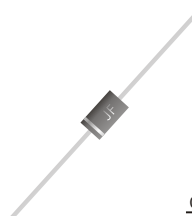


FEATURES

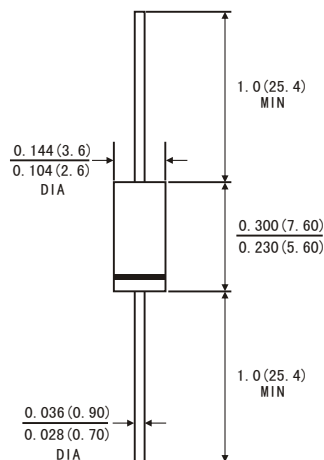
- Low leakage, low zener impedance at low current
- Maximum power dissipation of 2.5W is ideally suited for stabilized power supply, etc.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

- Case: DO-15 molded plastic, SMB package is upon request.
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- *Polarity:* Color band denotes cathode end



DO-15



ABSOLUTE MAXIMUM RATINGS (LIMITING VALUES) (TA=25°C)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation	P _{tot}	2.5	W
Junction temperature	T _J	200	°C
Storage temperature range	T _{STG}	-65 to +200	°C

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

ELECTRICAL CHARACTERISTICS (TA=25 °C)

	Symbols	Min	Typ	Max	Units
Thermal resistance junction to ambient	R _{θJA}			50 ¹⁾	°C/W
Forward voltage at I _F =200mA	V _F			1.2	V

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

1N5016... PLASTIC PACKAGE ZENER DIODES

Electrical characteristics(TA=25°C)

Type	Nominal Zener Voltage		Maximum Zener Impedance			Maximum reverse leakage current		Max regulator zener current
	Vz@IzT	IzT	ZzT@IzT	Zzx@Izx	Izx	Ir@VR	VR	IzM@50°C
	V	mA	Ω	Ω	mA	uA	V	mA
1N5016	6.8	92	1.8	700	0.5	10	4.8	350
1N5017	7.5	83	1.9	700	0.5	10	5.3	317
1N5018	8.2	76.0	2.1	700	0.5	10	5.8	290
1N5019	9.1	69.0	2.4	700	0.5	10	6.6	262
1N5020	10.0	62.0	3.0	700	0.25	10	7.2	238
1N5021	11.0	57.0	3.6	700	0.25	10	8.0	216
1N5022	12.0	52.0	4.2	700	0.25	10	8.6	196
1N5023	13.0	48.0	4.8	700	0.25	10	9.4	183
1N5024	14.0	45.0	5.4	700	0.25	10	10.1	170
1N5025	15.0	42.0	6.0	700	0.25	10	10.8	159
1N5026	16.0	39.0	6.6	700	0.25	10	11.6	149
1N5027	17.0	37.0	7.2	700	0.25	10	12.3	140
1N5028	18.0	35.0	7.8	750	0.25	10	13.0	132
1N5029	19.0	33.0	8.4	750	0.25	10	13.7	125
1N5030	20.0	31.0	9.0	750	0.25	10	14.4	119
1N5031	22.0	26.0	9.6	750	0.25	10	15.9	106
1N5032	24.0	26.0	10.0	750	0.25	10	17.3	99
1N5033	25.0	26.0	11.0	750	0.25	10	18.1	99
1N5034	27.0	23.0	12.0	750	0.25	10	19.5	88
1N5035	30.0	21.0	15.0	1000	0.25	10	21.7	79
1N5036	33.0	19.0	18.0	1000	0.25	10	23.9	72
1N5037	36.0	17.0	21.0	1000	0.25	10	26.0	66
1N5038	39.0	16.0	24.0	1000	0.25	10	28.1	61
1N5039	43.0	15.0	27.0	1500	0.25	10	31.1	55
1N5040	45.0	14.0	30.0	1500	0.25	10	32.5	53
1N5041	47.0	13.0	33.0	1500	0.25	10	33.9	50
1N5042	50.0	12.0	36.0	1500	0.25	10	36.1	47
1N5043	51.0	12.0	36.0	2000	0.25	10	36.9	46
1N5044	52.0	12.0	39.0	2000	0.25	10	37.5	45
1N5045	56.0	11.0	45.0	2000	0.25	10	40.5	42
1N5046	62.0	10.0	51.0	2000	0.25	10	44.8	38
1N5047	68.0	9.2	57.0	2000	0.25	10	49.2	35
1N5048	75.0	8.3	66.0	2000	0.25	10	54.1	31
1N5049	82.0	7.6	78.0	3000	0.25	10	59.2	29
1N5050	91.0	6.9	90.0	3000	0.25	10	65.8	26
1N5051	100	6.2	120	3000	0.25	10	72.2	23

Note:

- 1.standard zener voltage tolerance available is $\pm 10\%$.Add suffix "B" is for $\pm 5\%$.
- 2.For surface mounted package, the type name is SMB50XX.