YBZ3D3V3J THRU YBZ3D200J

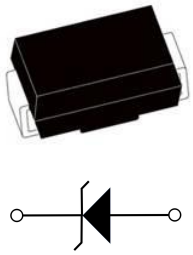
FEATURES

- Total power dissipation: Max. 3W.
- Wide zener reverse voltage range 3.3V to 200V.
- Small plastic package suitable for surface mounted design.

Mechanical Date

- Case: SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Standard voltage tolerance is 5 %, Suffix J ± 5 %

DO-214AA



Absolute Maximum Ratings And Characteristics （Ta = 25 °C）

Parameter	Symbol	Value	Unit
Power Dissipation	P_d (T_L=75℃)	3	W
Zener current	I_Z	P_V/V_Z	mA
Forward voltage	VF(I_F=200mA)	1.5	V
Thermal Resistance From Junction to Ambient	RJA	226	℃/WC
Junction Temperature Range	T_j,	-65～+150	℃
Storage Temperature Range	T_{stg}	-65～+150	℃

Electrical Characteristics (TA = 25 °C)

Part Number	Nominal Zener Voltage @I_T			I_{ZT}(mA)	Maximum Zener Impedance	Maximum Reverse Leakage Current		Maximum DC Zener Current
	Nom（V）	Min（V）	Max（V）		Zzt max.@Izt (Ω)	Ir(uA)@V R	VR(V)	IZM（mA）
YBZ3D3V3J	3.3	3.13	3.47	113.6	10	100	1.0	454
YBZ3D3V6J	3.6	3.42	3.78	104.2	9.0	75	1.0	416
YBZ3D3V9J	3.9	3.70	4.10	96.1	7.5	25	1.0	384
YBZ3D4V7J	4.3	4.08	4.52	87.2	6.0	5.0	1.0	348
YBZ3D4V7J	4.7	4.46	4.94	79.8	5.0	5.0	1.5	319
YBZ3D5V1J	5.1	4.84	5.36	73.5	4.0	5.0	2.0	294
YBZ3D5V6J	5.6	5.32	5.88	66.9	2.0	5.0	3.0	267
YBZ3D6V2J	6.2	5.89	6.51	60.5	2.0	5.0	4.0	241
YBZ3D6V8J	6.8	6.46	7.14	55.1	2.5	5.0	5.2	220
YBZ3D7V5J	7.5	7.12	7.88	50.0	3.0	5.0	6.0	200
YBZ3D8V2J	8.2	7.79	8.61	45.7	3.5	5.0	6.5	182
YBZ3D9V1J	9.1	8.64	9.56	41.2	4.0	5.0	7.0	164
YBZ3D10J	10	9.5	10.5	37.5	4.5	5.0	8.0	150
YBZ3D11J	11	10.45	11.55	34.1	5.5	1.0	8.4	136
YBZ3D12J	12	11.4	12.6	31.2	6.5	1.0	9.1	125
YBZ3D13J	13	12.35	13.65	28.8	7.0	1.0	9.9	115
YBZ3D15J	15	14.25	15.75	25.0	9.0	1.0	11.4	100

YBZ3D16J	16	15.2	16.8	23.4	10	1.0	12.2	93
YBZ3D18J	18	17.1	18.9	20.8	12	1.0	13.7	83
YBZ3D20J	20	19	21	18.7	14	1.0	15.2	75
YBZ3D22J	22	20.9	23.1	17.0	17.5	1.0	16.7	68
YBZ3D24J	24	22.8	25.2	15.6	19	1.0	18.2	62
YBZ3D27J	27	25.65	28.35	13.9	23	1.0	20.6	55
YBZ3D30J	30	28.5	31.5	12.5	28	1.0	22.8	50
YBZ3D33J	33	31.35	34.65	11.4	33	1.0	25.1	45
YBZ3D36J	36	34.2	37.8	10.4	38	1.0	27.4	41
YBZ3D39J	39	37.05	40.95	9.6	45	1.0	29.7	38
YBZ3D43J	43	40.85	45.15	8.7	53	1.0	32.7	34
YBZ3D47J	47	44.65	49.35	8.0	67	1.0	35.8	31
YBZ3D51J	51	48.45	53.55	7.3	70	1.0	38.8	29
YBZ3D56J	56	53.2	58.8	6.7	86	1.0	42.6	26
YBZ3D62J	62	58.9	65.1	6.0	100	1.0	47.1	24
YBZ3D68J	68	64.6	71.4	5.5	120	1.0	51.7	22
YBZ3D75J	75	71.25	78.75	5.0	140	1.0	56.0	20
YBZ3D82J	82	77.9	86.1	4.6	160	1.0	62.2	18
YBZ3D91J	91	86.45	95.55	4.1	200	1.0	69.2	16
YBZ3D100J	100	95	105	3.7	250	1.0	76.0	15
YBZ3D110J	110	114	126	3.4	300	1.0	83.6	13
YBZ3D120J	120	123.5	136.5	3.1	380	1.0	91.2	12
YBZ3D130J	135	142.5	157.5	2.9	450	1.0	98.8	11
YBZ3D150J	150	152	168	2.5	600	1.0	114.0	10
YBZ3D160J	165	171	189	2.3	700	1.0	121.6	9.0
YBZ3D180J	180	190	210	2.1	900	1.0	136.8	8.0
YBZ3D200J	200	3.13	3.47	1.9	1200	1.0	152.0	7.0

(1) The revese surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per method.

Typical Characteristics

Figure 1. Steady State Power Derating

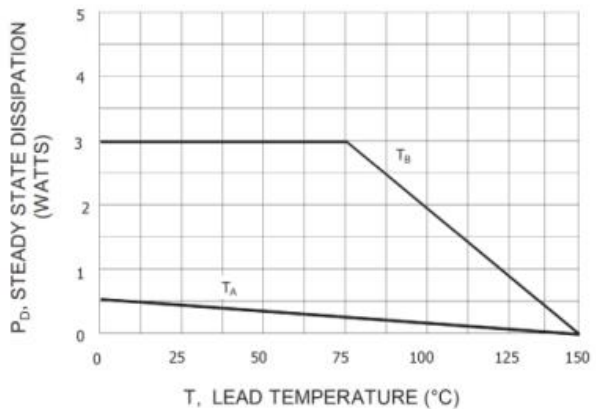


Figure 2. Maximum Surge Power

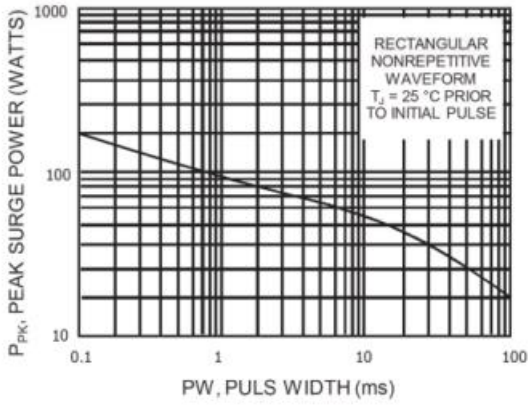


Figure 3. Zener Voltage – To 12 Volts

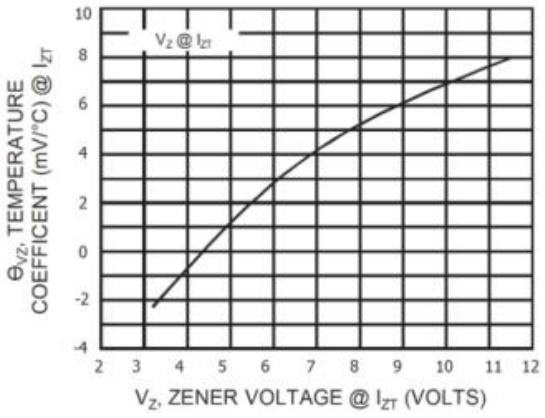


Figure 4. Zener Voltage – 14 To 200 Volts

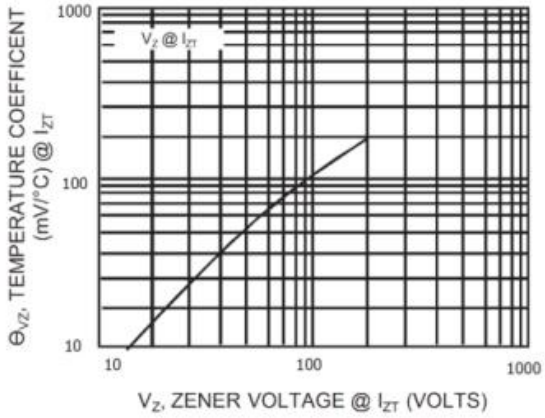


Figure 5. V_Z = 3.3 thru 10 Volts

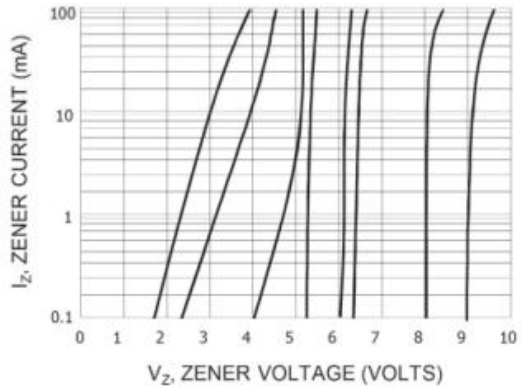
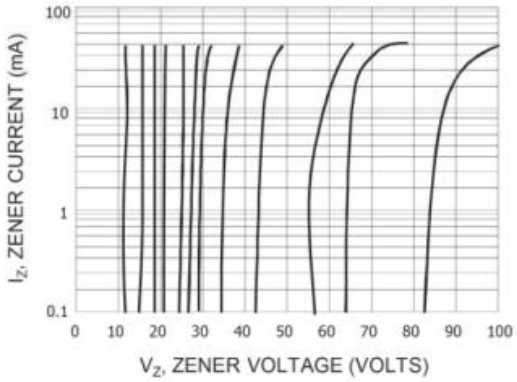
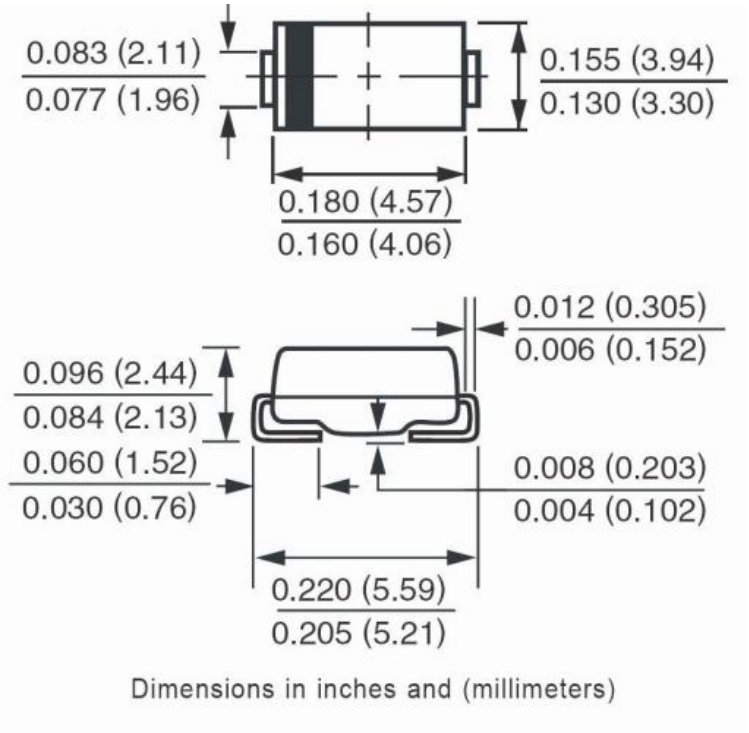


Figure 6. V_Z = 12 thru 82 Volts



Package Outline



Dimensions in inches and (millimeters)