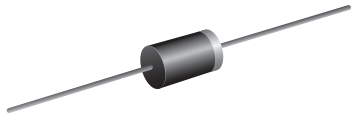
BZT03D6V2 - BZT03D270

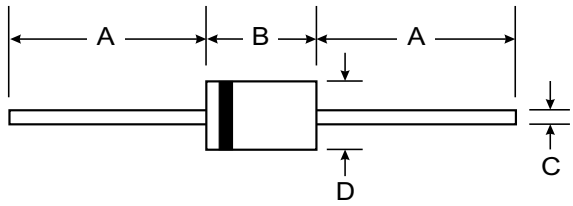
AXIAL LEADED SILICON ZENER DIODES

VOLTAGE RANGE: 6.2 - 270V
POWER: 3.25Watts



Features

- Hermetically sealed package
- Clamping time in picoseconds



DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Mechanical Data

- Case: DO-15,molded plastic
- Terminals: Axial leads solderable per MIL-STD-202,Method 208
- Polarity: Color band denotes cathods end
- Mounting position: any
- Weight : 0.465 gram

RoHS COMPLIANT

Maximum Ratings and Thermal Characteristics

(T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Total power dissipation at Ttp=25°C	P_{tot}	3.25	W
Power dissipation at T_A=45°C	P_{tot}	1.3	W
Forward voltage @I_F=0.5A	V_F	1.2	V
Maximum thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	100	°C/W
Peak reverse power dissipation tp=100μs square wave	P_{ZSM}	600	W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note:1.On PC board with spacing 25mm

ELECTRICAL CHARACTERISTICS

Type	Zener Voltage Range(2)			Dynamic Resistance		Test Current	Temperature Coefficient of Zener Voltage		Reverse Leakage Current		Clamping		Stand-off	
	V_Z@I_{ZT}			r_{zj}@I_{ZT}, f=1kH$_Z$		I_{ZT}	α_{VZ}@I_{ZT}		I_R@V_R		$V_{(CL)R}$ 1) @ I_{RMS}		I_R@V_R 2)	
	V			Ω		m A	%/K		μ A	V	V	A	μ A	V
	Min	Typ.	Max	Typ	Max		Min	Max	Max		Max		Max	
BZT03D6V2	5.6	6.2	6.8	1.0	2.0	100	0	0.07	1500	4.4	9.5	34	3000	4.8
BZT03D6V8	6.1	6.8	7.5	1.0	2.0	100	0	0.07	1000	4.8	10.5	31	2000	5.3
BZT03D7V5	6.75	7.5	8.25	1.0	2.0	100	0	0.07	750	5.3	11.6	26.5	1500	5.9
BZT03D8V2	7.4	8.2	9	1.0	2.0	100	0.03	0.08	600	5.9	12.6	24.4	1200	6.5
BZT03D9V1	8.2	9.1	10	2.0	4.0	50	0.03	0.08	20	6.5	13.7	22.7	50	7.1
BZT03D10	9	10	11	2.0	4.0	50	0.05	0.09	10	7.1	15.2	20.3	20	7.9
BZT03D11	9.9	11	12.1	4.0	7.0	50	0.05	0.10	4.0	7.9	16.2	19.1	5.0	8.6
BZT03D12	10.8	12	13.2	4.0	7.0	50	0.05	0.10	3.0	8.6	17.5	17.7	5.0	9.3
BZT03D13	11.7	13	14.3	5.0	10	50	0.05	0.10	2.0	9.3	19.1	15.9	5.0	10.6
BZT03D15	13.5	15	16.5	5.0	10	50	0.05	0.10	1.0	10.6	21.8	14.4	5.0	11.6
BZT03D16	14.4	16	17.6	6.0	15	25	0.06	0.11	1.0	11.6	23.4	13.1	5.0	12.6
BZT03D18	16.2	18	19.8	6.0	15	25	0.06	0.11	1.0	12.6	26.3	11.7	5.0	14.4
BZT03D20	18.0	20	22.0	6.0	15	25	0.06	0.11	1.0	14.4	29.2	10.6	5.0	15.8
BZT03D22	29.8	22	24.2	6.0	15	25	0.06	0.11	1.0	15.8	31.9	9.7	5.0	17.2
BZT03D24	21.6	24	26.4	7.0	15	25	0.06	0.11	1.0	17.2	34.6	8.9	5.0	19.4
BZT03D27	24.3	27	29.7	7.0	15	25	0.06	0.11	1.0	19.4	39	7.9	5.0	21.5
BZT03D30	27.0	30	33.0	8.0	15	25	0.06	0.11	1.0	21.5	43.5	7.1	5.0	23.5
BZT03D33	29.7	33	36.3	8.0	15	25	0.06	0.11	1.0	23.5	47.5	6.5	5.0	25.8
BZT03D36	32.4	36	39.6	21	40	10	0.06	0.11	1.0	25.8	51.5	6.0	5.0	28
BZT03D39	35.1	39	42.9	21	40	10	0.06	0.11	1.0	28	56	5.5	5.0	31
BZT03D43	38.7	43	47.3	24	45	10	0.07	0.12	1.0	31	62	4.9	5.0	33.5
BZT03D47	42.3	47	51.7	24	45	10	0.07	0.12	1.0	33.5	67.5	4.6	5.0	36.5
BZT03D51	45.9	51	56.1	25	60	10	0.07	0.12	1.0	36.5	73	4.2	5.0	40
BZT03D56	50.4	56	61.6	25	60	10	0.07	0.12	1.0	40	81	3.8	5.0	44.5
BZT03D62	55.8	62	68.2	25	80	10	0.08	0.13	1.0	44.5	89	3.5	5.0	49
BZT03D68	61.2	68	74.8	25	80	10	0.08	0.13	1.0	49	97	3.2	5.0	54
BZT03D75	67.5	75	82.5	30	100	10	0.08	0.13	1.0	54	107	2.9	5.0	59
BZT03D82	73.8	82	90.2	30	100	10	0.08	0.13	1.0	59	117	2.6	5.0	65
BZT03D91	81.9	91	100	60	200	5.0	0.09	0.13	1.0	65	130	2.4	5.0	71
BZT03D100	90	100	110	60	200	5.0	0.09	0.13	1.0	71	143	2.2	5.0	79
BZT03D110	99	110	121	80	250	5.0	0.09	0.13	1.0	79	157	2.0	5.0	86
BZT03D120	108	120	132	80	250	5.0	0.09	0.13	1.0	86	172	1.8	5.0	93
BZT03D130	117	130	143	110	300	5.0	0.09	0.13	1.0	93	187	1.6	5.0	106
BZT03D150	135	150	165	130	300	5.0	0.09	0.13	1.0	106	213	1.5	5.0	116
BZT03D160	144	160	176	150	350	5.0	0.09	0.13	1.0	116	229	1.3	5.0	126
BZT03D180	162	180	198	180	400	5.0	0.09	0.13	1.0	126	256	1.2	5.0	144
BZT03D200	180	200	220	200	500	5.0	0.09	0.13	1.0	144	284	1.1	5.0	158
BZT03D220	198	220	242	350	750	2.0	0.09	0.13	1.0	158	314	1.0	5.0	172
BZT03D240	216	240	264	400	850	2.0	0.09	0.13	1.0	172	364	0.9	5.0	194
BZT03D270	243	270	297	450	1000	2.0	0.09	0.13	1.0	194	388	0.8	5.0	215

(1)10/1000 exp.falling pulse tp=1000μs down to 50%

(2)Stand-off voltage=recommended suplly voltage.