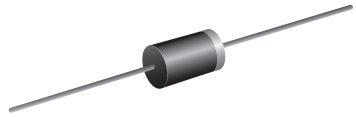
BZT03C6V2 - BZT03C270

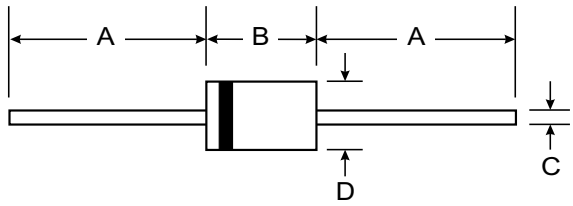
AXIAL LEADED SILICON ZENER DIODES

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.	
BZT03C6V2	5.8	6.2	6.6	1.0	2.0	100	0	0.07	1500	4.7	9.3	34	3000	5.1
BZT03C6V8	6.4	6.8	7.2	1.0	2.0	100	0	0.07	1000	5.1	10.2	31	2000	5.6
BZT03C7V5	7.0	7.5	7.9	1.0	2.0	100	0	0.07	750	5.6	11.3	26.5	1500	6.2
BZT03C8V2	7.7	8.2	8.7	1.0	2.0	100	0.03	0.08	600	6.2	12.3	24.4	1200	6.8
BZT03C9V1	8.5	9.1	9.6	2.0	4.0	50	0.03	0.08	20	6.8	13.3	22.7	50	7.5
BZT03C10	9.4	10	10.6	2.0	4.0	50	0.05	0.09	10	7.5	14.8	20.3	20	8.2
BZT03C11	10.4	11	11.6	4.0	7.0	50	0.05	0.10	4.0	8.2	15.7	19.1	5.0	9.1
BZT03C12	11.4	12	12.7	4.0	7.0	50	0.05	0.10	3.0	9.1	17.0	17.7	5.0	10
BZT03C13	12.4	13	14.1	5.0	10	50	0.05	0.10	2.0	10	18.9	15.9	5.0	11
BZT03C15	13.8	15	15.6	5.0	10	50	0.05	0.10	1.0	11	20.9	14.4	5.0	12
BZT03C16	15.3	16	17.1	6.0	15	25	0.06	0.11	1.0	12	22.9	13.1	5.0	13
BZT03C18	16.8	18	19.1	6.0	15	25	0.06	0.11	1.0	13	25.6	11.7	5.0	15
BZT03C20	18.8	20	21.2	6.0	15	25	0.06	0.11	1.0	15	28.4	10.6	5.0	16
BZT03C22	20.8	22	23.3	6.0	15	25	0.06	0.11	1.0	16	31.0	9.7	5.0	18
BZT03C24	22.8	24	25.6	7.0	15	25	0.06	0.11	1.0	18	33.8	8.9	5.0	20
BZT03C27	25.1	27	28.9	7.0	15	25	0.06	0.11	1.0	20	38.1	7.9	5.0	22
BZT03C30	28	30	32	8.0	15	25	0.06	0.11	1.0	22	42.2	7.1	5.0	24
BZT03C33	31	33	35	8.0	15	25	0.06	0.11	1.0	24	46.2	6.5	5.0	27
BZT03C36	34	36	38	21	40	10	0.06	0.11	1.0	27	50.1	6.0	5.0	30
BZT03C39	37	39	41	21	40	10	0.06	0.11	1.0	30	54.1	5.5	5.0	33
BZT03C43	40	43	46	24	45	10	0.07	0.12	1.0	33	60.7	4.9	5.0	36
BZT03C47	44	47	50	24	45	10	0.07	0.12	1.0	36	65.5	4.6	5.0	39
BZT03C51	48	51	54	25	60	10	0.07	0.12	1.0	39	70.8	4.2	5.0	43
BZT03C56	52	56	60	25	60	10	0.07	0.12	1.0	43	78.6	3.8	5.0	47
BZT03C62	58	62	66	25	80	10	0.08	0.13	1.0	47	86.5	3.5	5.0	51
BZT03C68	64	68	72	25	80	10	0.08	0.13	1.0	51	94.4	3.2	5.0	56
BZT03C75	70	75	79	30	100	10	0.08	0.13	1.0	56	103.5	2.9	5.0	62
BZT03C82	77	82	87	30	100	10	0.08	0.13	1.0	62	114	2.6	5.0	68
BZT03C91	85	91	96	60	200	5.0	0.09	0.13	1.0	68	126	2.4	5.0	75
BZT03C100	94	100	106	60	200	5.0	0.09	0.13	1.0	75	139	2.2	5.0	82
BZT03C110	104	110	116	80	250	5.0	0.09	0.13	1.0	82	152	2.0	5.0	91
BZT03C120	114	120	127	80	250	5.0	0.09	0.13	1.0	91	167	1.8	5.0	100
BZT03C130	124	130	141	110	300	5.0	0.09	0.13	1.0	100	185	1.6	5.0	110
BZT03C150	138	150	156	130	300	5.0	0.09	0.13	1.0	110	204	1.5	5.0	120
BZT03C160	153	160	171	150	350	5.0	0.09	0.13	1.0	120	224	1.3	5.0	130
BZT03C180	168	180	191	180	400	5.0	0.09	0.13	1.0	130	249	1.2	5.0	150
BZT03C200	188	200	212	200	500	5.0	0.09	0.13	1.0	150	276	1.1	5.0	160
BZT03C220	208	220	233	350	750	2.0	0.09	0.13	1.0	160	305	1.0	5.0	180
BZT03C240	228	240	256	400	850	2.0	0.09	0.13	1.0	180	336	0.9	5.0	200
BZT03C270	251	270	289	450	1000	2.0	0.09	0.13	1.0	200	380	0.8	5.0	220

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

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