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BZX79C2V4 THRU BZX79C75

500mW Silicon Zener Diodes

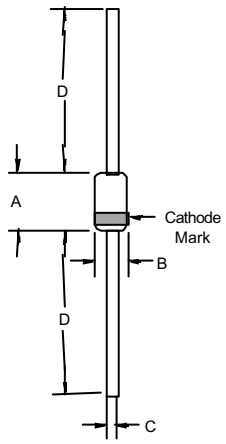
Features

- Zener Voltage Range 2.4V to 75V
- Metallurgical Bonded C onstrrction
- Double Slug Type Construction
- Lead Free Finish/Rohs Compliant (Note1)

Mechanical Data

- Case: Double slug type, hermetically sealed glass
- Polarity: Cathode indicated by polarity band
- Marking : Type Number
- Moisture Sensitivity: Level 1

DO-35 GLASS



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

Maximum Ratings*

	Symbol	Value	Units
Max. Steady State Power Dissipation at T_L<75°C, Lead Length=3/8"	P_D	500	mW
Derate above 75°C		4.0	mW/°C
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65 to 175	°C

Electrical Characteristics @ 25° C Unless Otherwise Specified

	Symbol	Maximum	Unit
Max. Forward Voltage @ I_F=10mA	V_F	0.9	V

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

BZX79C2V4 thru BZX79C75

Electrical Characteristics

Part Number	Zener Voltage				$Z_{ZT}@I_{ZT}$	Leakage Current		$Z_{ZK}@I_{ZK}$		TC_{VZ}
	VZ(Volts) (1)			@ IZT		IR @ VR				
	Min	Nom	Max	mA	Ohms	uA	Volts	Ohms	mA	%/K
BZX79C2V4	2.2	2.4	2.6	5	100	50	1	600	1	-0.009~-0.06
BZX79C2V7	2.5	2.7	2.9	5	100	20	1	600	1	-0.009~-0.06
BZX79C3V0	2.8	3	3.2	5	95	10	1	600	1	-0.08~-0.05
BZX79C3V3	3.1	3.3	3.5	5	95	5	1	600	1	-0.08~-0.05
BZX79C3V6	3.4	3.6	3.8	5	90	5	1	600	1	-0.08~-0.05
BZX79C3V9	3.7	3.9	4.1	5	90	3	1	600	1	-0.08~-0.05
BZX79C4V3	4	4.3	4.6	5	90	3	1	600	1	-0.06~-0.03
BZX79C4V7	4.4	4.7	5	5	80	3	1	500	1	-0.05~+0.02
BZX79C5V1	4.8	5.1	5.4	5	60	2	1	480	1	-0.02~+0.02
BZX79C5V6	5.2	5.6	6	5	40	1	1	400	1	-0.05~+0.05
BZX79C6V2	5.8	6.2	6.6	5	10	3	2	150	1	0.03~0.06
BZX79C6V8	6.4	6.8	7.2	5	15	2	3	80	1	0.03~0.07
BZX79C7V5	7	7.5	7.9	5	15	1	5	80	1	0.03~0.07
BZX79C8V2	7.7	8.2	8.7	5	15	0.7	6	80	1	0.03~0.08
BZX79C9V1	8.5	9.1	9.6	5	20	0.5	7	100	1	0.03~0.09
BZX79C10	9.4	10	10.6	5	20	0.1	7.5	150	1	0.03~0.1
BZX79C11	10.4	11	11.6	5	20	0.1	8.5	150	1	0.03~0.11
BZX79C12	11.4	12	12.7	5	25	0.1	9	150	1	0.03~0.11
BZX79C13	12.4	13	14.1	5	30	0.05	10	170	1	0.03~0.11
BZX79C15	13.8	15	15.6	5	30	0.05	11	200	1	0.03~0.11
BZX79C16	15.3	16	17.1	5	40	0.05	12	200	1	0.03~0.11
BZX79C18	16.8	18	19.1	5	45	0.05	13	225	1	0.03~0.11
BZX79C20	18.8	20	21.2	5	55	0.05	15	225	1	0.03~0.11
BZX79C22	20.8	22	23.3	5	55	0.05	16	250	1	0.04~0.12
BZX79C24	22.8	24	25.6	5	70	0.05	18	250	1	0.04~0.12
BZX79C27	25.1	27	28.9	2	80	0.05	20	300	1	0.04~0.12
BZX79C30	28	30	32	2	80	0.05	22	300	1	0.04~0.12
BZX79C33	31	33	35	2	80	0.05	24	325	1	0.04~0.12
BZX79C36	34	36	38	2	90	0.05	27	350	1	0.04~0.12
BZX79C39	37	39	41	2	130	0.05	28	350	0.5	0.04~0.12
BZX79C43	40	43	46	2	150	0.05	32	375	0.5	0.04~0.12
BZX79C47	44	47	50	2	170	0.05	35	375	0.5	0.04~0.12
BZX79C51	48	51	54	2	180	0.05	38	400	0.5	0.04~0.12
BZX79C56	52	56	60	2	200	0.05	39	425	0.5	0.04~0.12
BZX79C62	58	62	66	2	215	0.05	43	450	0.5	0.04~0.12
BZX79C68	64	68	72	2	240	0.05	48	475	0.5	0.04~0.12
BZX79C75	70	75	79	2	255	0.05	53	500	0.5	0.04~0.12

Note 1. Tighter tolerance of Vz available ---BZX79B……±2% tolerance

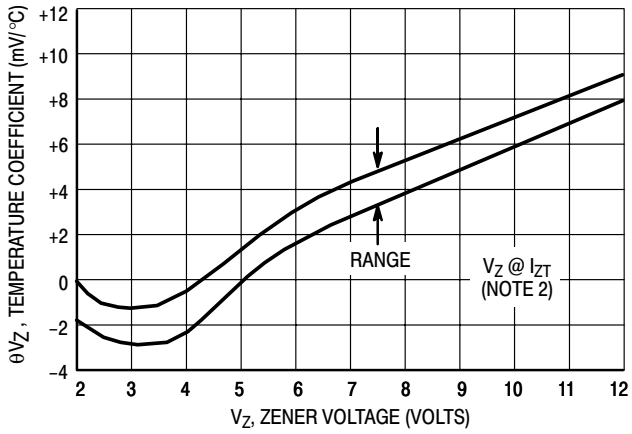


Figure 1a. Range for Units to 12 Volts

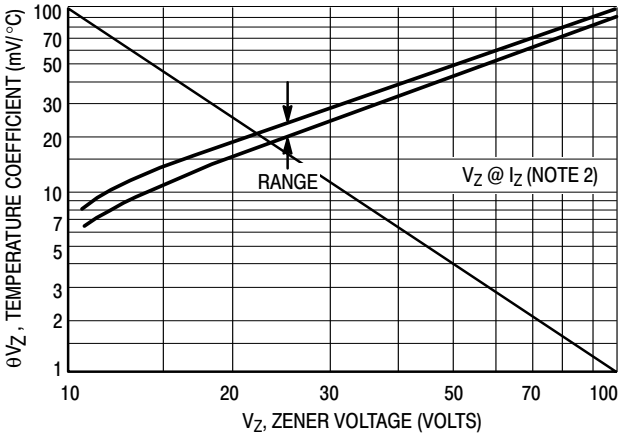


Figure 1b. Range for Units 12 to 100 Volts

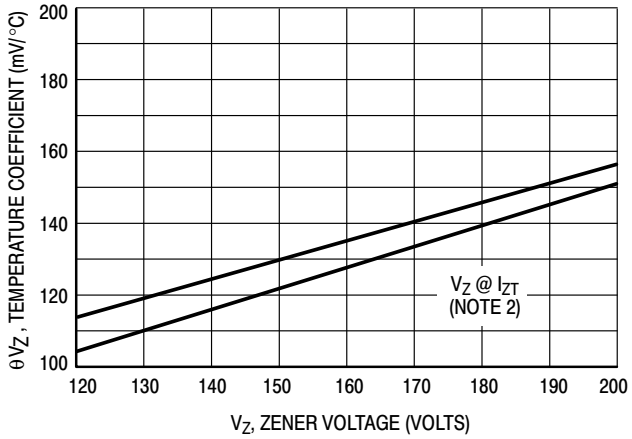


Figure 1c. Range for Units 120 to 200 Volts

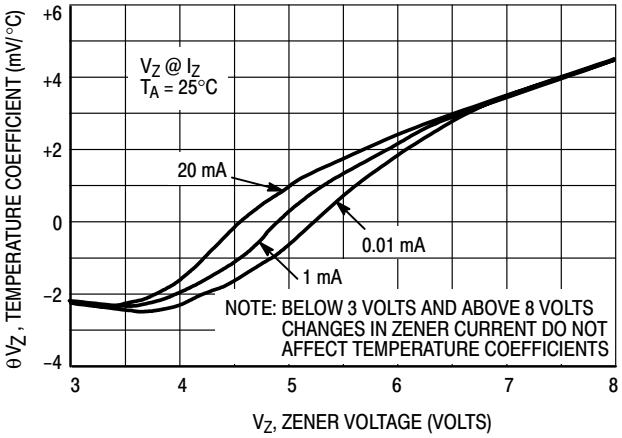


Figure 2. Effect of Zener Current

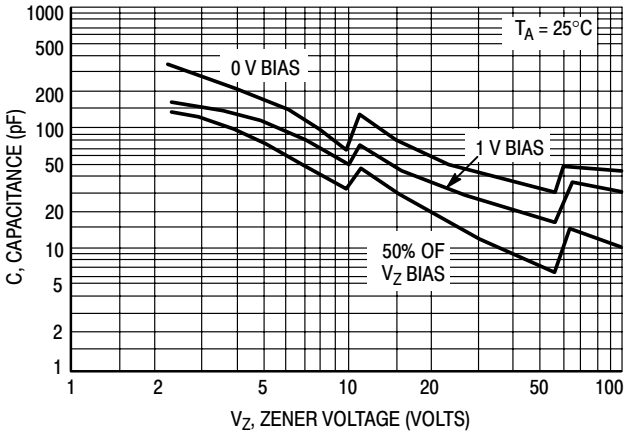


Figure 3a. Typical Capacitance 2.4–100 Volts

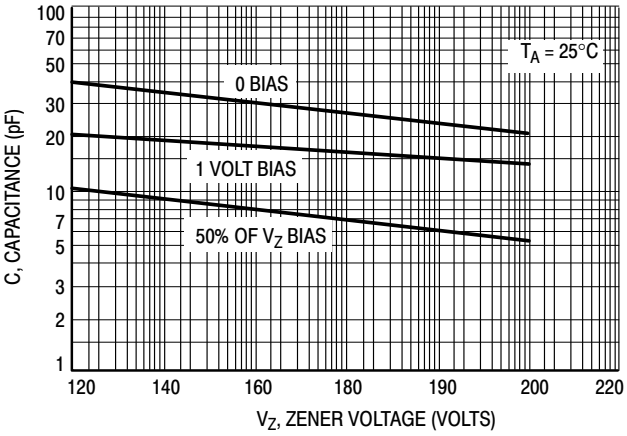


Figure 3b. Typical Capacitance 120–200 Volts

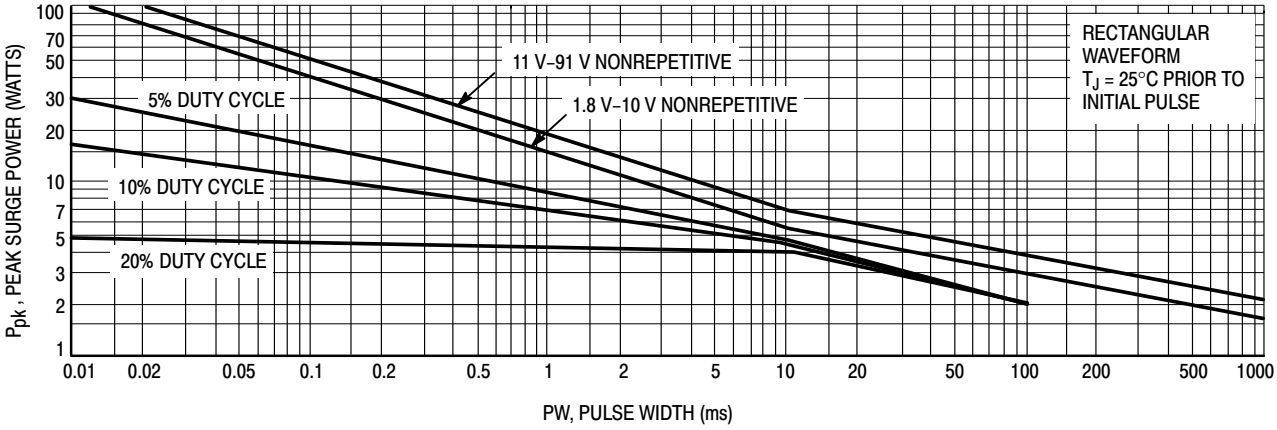


Figure 4a. Maximum Surge Power 1.8–91 Volts

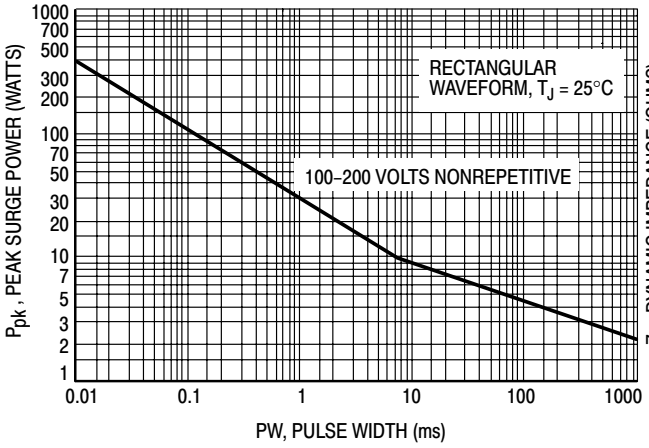


Figure 4b. Maximum Surge Power DO-204AH 100–200 Volts

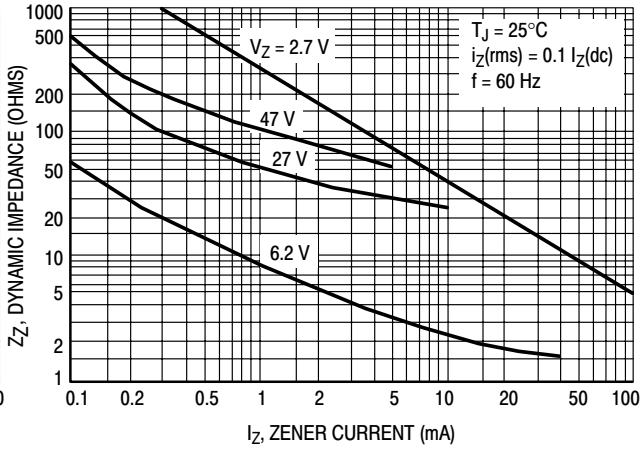


Figure 5 Effect of Zener Current on Zener Impedance

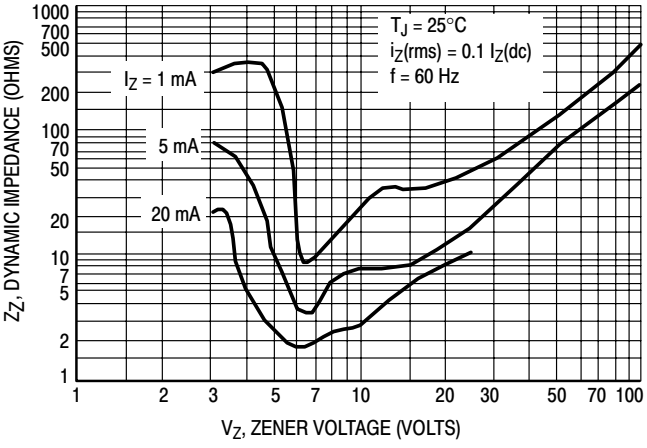


Figure 6. Effect of Zener Voltage on Zener Impedance

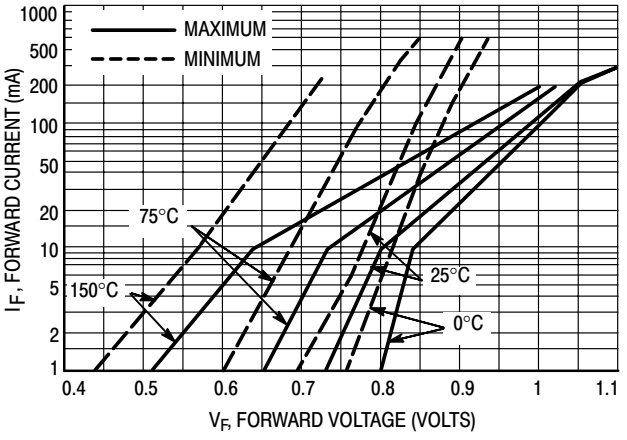


Figure 7. Typical Forward Characteristics