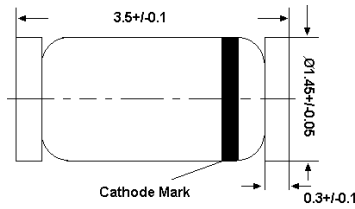


BZV55C1V0 THRU BZV55C75

Silicon Epitaxial Planar Zener Diodes

LL-34



Glass case MiniMELF
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^\circ\text{C}$
¹⁾ Valid provided that electrodes are kept at ambient temperature			

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100 \text{ mA}$	V_F	1	V
¹⁾ Valid provided that electrodes are kept at ambient temperature			

BZV55C1V0 THRU BZV55C75

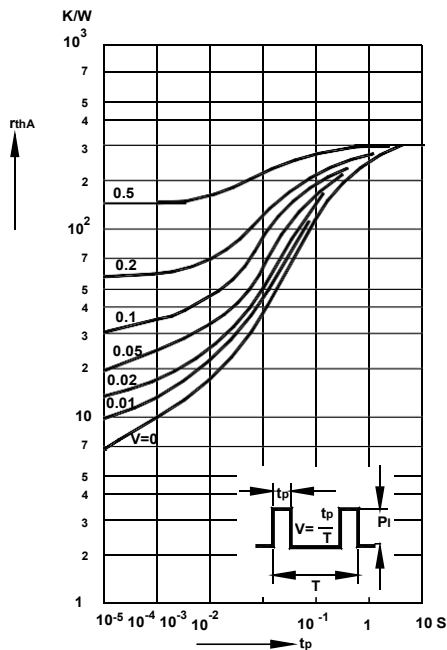
Characteristics at $T_a = 25^\circ\text{C}$

Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$	at V_R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
BZV55C1V0	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
BZV55C2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
BZV55C2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
BZV55C2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
BZV55C2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
BZV55C3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
BZV55C3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
BZV55C4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
BZV55C5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
BZV55C5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
BZV55C6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
BZV55C6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
BZV55C7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
BZV55C8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
BZV55C9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
BZV55C10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
BZV55C11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
BZV55C12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
BZV55C13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
BZV55C15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
BZV55C16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
BZV55C18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
BZV55C20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
BZV55C22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
BZV55C24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
BZV55C27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
BZV55C30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
BZV55C33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
BZV55C36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
BZV55C39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZV55C43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZV55C47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZV55C51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZV55C56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZV55C62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZV55C68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZV55C75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

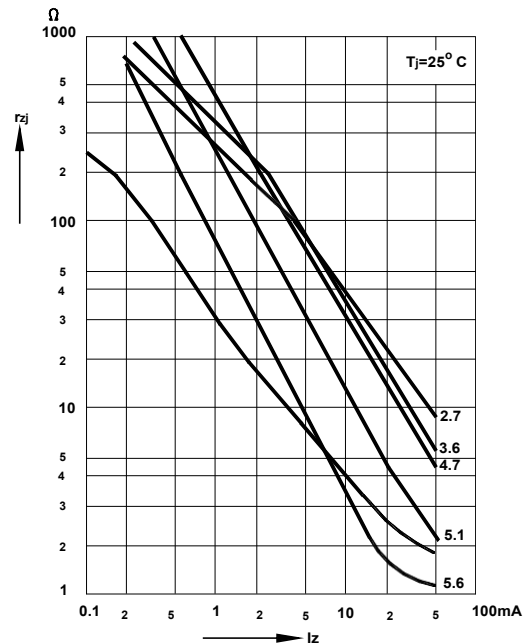
¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

BZV55C1V0 THRU BZV55C75

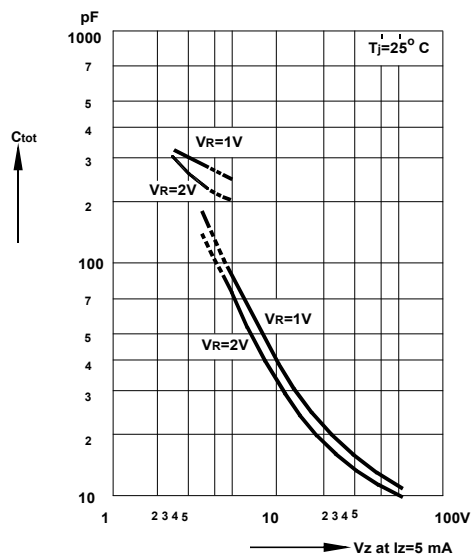
Pulse thermal resistance versus pulse duration
 Valid provided that the electrodes are kept at ambient temperature.



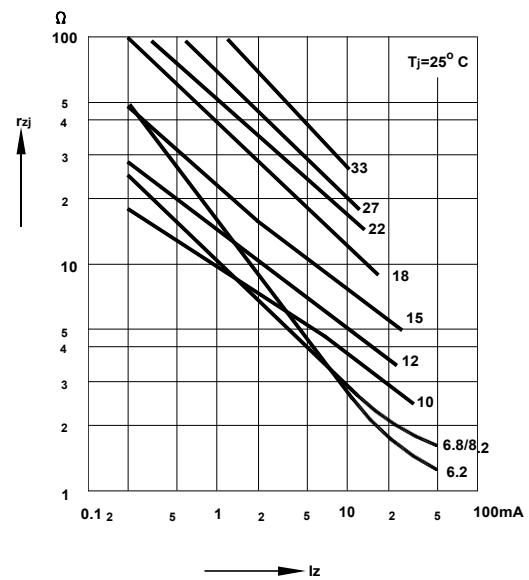
Dynamic resistance versus Zener current



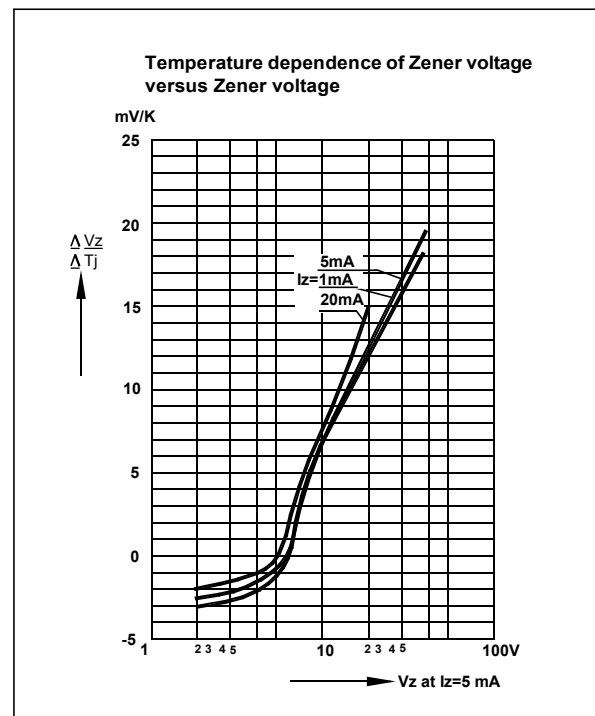
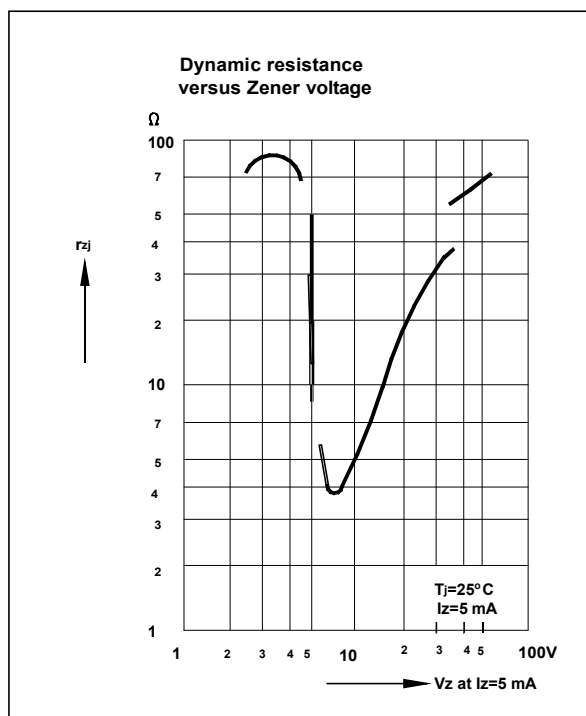
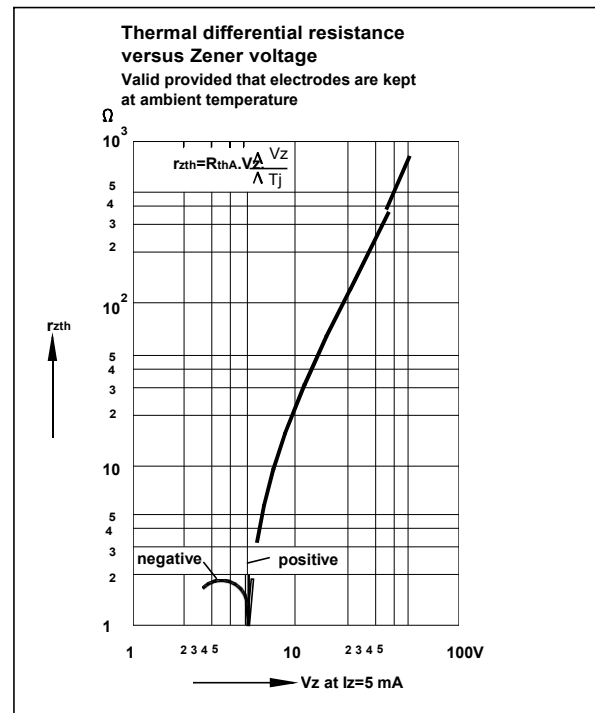
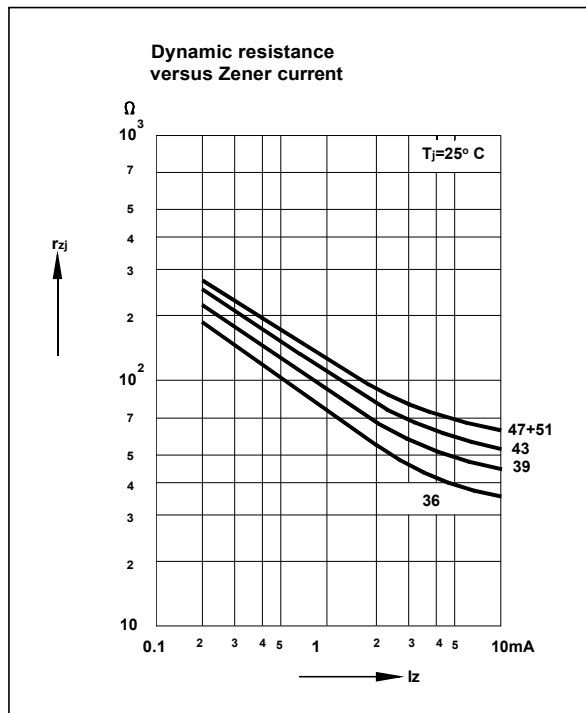
Capacitance versus Zener voltage



Dynamic resistance versus Zener current



BZV55C1V0 THRU BZV55C75



BZV55C1V0 THRU BZV55C75

