



SURFACE MOUNT ZENER DIODES

BZQ55C-SERIES(500mW)

Device Type	Nominal zener Voltage Vz at IzT*	Test Current IzT	Maximum Zener Impedance		Typical Temperature coefficient	Maximum Reverse Leakage Current		Maximum Regulator Current IzM
			ZzT at IzT	Zzk at Izk=1mA		IR	Test-Voltage suffix B	
	Volts	mA	Ω	Ω	%/°C	μ A	Volts	mA
BZQ55-C2V4	2.28-2.56	5	85	600	-0.070	50	1.0	150
BZQ55-C2V7	2.5-2.9	5	85	600	-0.070	10	1.0	135
BZQ55-C3V0	2.8-3.2	5	85	600	-0.070	4	1.0	125
BZQ55-C3V3	3.1-3.5	5	85	600	-0.065	2	1.0	115
BZQ55-C3V6	3.4-3.8	5	85	600	-0.060	2	1.0	105
BZQ55-C3V9	3.7-4.1	5	85	600	-0.050	2	1.0	95
BZQ55-C4V3	4.0-4.6	5	75	600	-0.025	1	1.0	90
BZQ55-C4V7	4.4-5.0	5	60	600	-0.010	0.5	1.0	85
BZQ55-C5V1	4.8-5.4	5	35	550	+0.015	0.1	1.0	80
BZQ55-C5V6	5.2-6.0	5	25	450	+0.025	0.1	1.0	70
BZQ55-C6V2	5.8-6.6	5	10	200	+0.035	0.1	2.0	64
BZQ55-C6V8	6.4-7.2	5	8	150	+0.045	0.1	3.0	58
BZQ55-C7V5	7.0-7.9	5	7	50	+0.050	0.1	5.0	53
BZQ55-C8V2	7.7-8.7	5	7	50	+0.050	0.1	6.0	47
BZQ55-C9V1	8.5-9.6	5	10	50	+0.060	0.1	7.0	43
BZQ55-C10	9.4-10.6	5	15	70	+0.070	0.1	7.5	40
BZQ55-C11	10.4-11.6	5	20	70	+0.070	0.1	8.5	36
BZQ55-C12	11.4-12.7	5	20	90	+0.070	0.1	9.0	32
BZQ55-C13	12.4-14.1	5	26	110	+0.070	0.1	10	29
BZQ55-C15	13.8-15.6	5	30	110	+0.070	0.1	11	27
BZQ55-C16	15.3-17.1	5	40	170	+0.070	0.1	12	24
BZQ55-C18	16.8-19.1	5	50	170	+0.070	0.1	14	21
BZQ55-C20	18.8-21.2	5	55	220	+0.070	0.1	15	20
BZQ55-C22	20.8-23.3	5	55	220	+0.070	0.1	17	18
BZQ55-C24	22.8-25.6	5	80	220	+0.080	0.1	18	16
BZQ55-C27	25.1-28.9	5	80	220	+0.080	0.1	20	14
BZQ55-C30	28-32	5	80	220	+0.080	0.1	22	13
BZQ55-C33	31-35	5	80	220	+0.080	0.1	24	12
BZQ55-C36	34-38	5	80	220	+0.080	0.1	27	11
BZQ55-C39	37-41	2.5	90	500	+0.080	0.1	30	10
BZQ55C-43	40-46	2.5	90	600	+0.080	0.1	33	9.2
BZQ55C-47								
BZQ55C-45								
BZQ55C-46								
BZQ55C-47								

STANDARD VOLTAGE TOLERANCE IS $\pm 5\%$ AND:

SUFFIX "A" FOR $\pm 1\%$

SUFFIX "B" FOR $\pm 2\%$

SUFFIX "C" FOR $\pm 5\%$

SUFFIX "D" FOR $\pm 20\%$

1. STANDARD ZENER DIODE 500MW

VZ TOLERANCE. = $\pm 5\%$

2. QUADRO MELF MOLDED GLASS.

*MEASURED WITH PULSES $T_p = 20\text{m SEC.}$



SURFACE MOUNT ZENER DIODES

BZQ55C-SERIES

Absolute Maximum Ratings

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$	P_{tot}	500*	mW
Junction Temperature	T_j°	175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^{\circ}\text{C}$

*Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

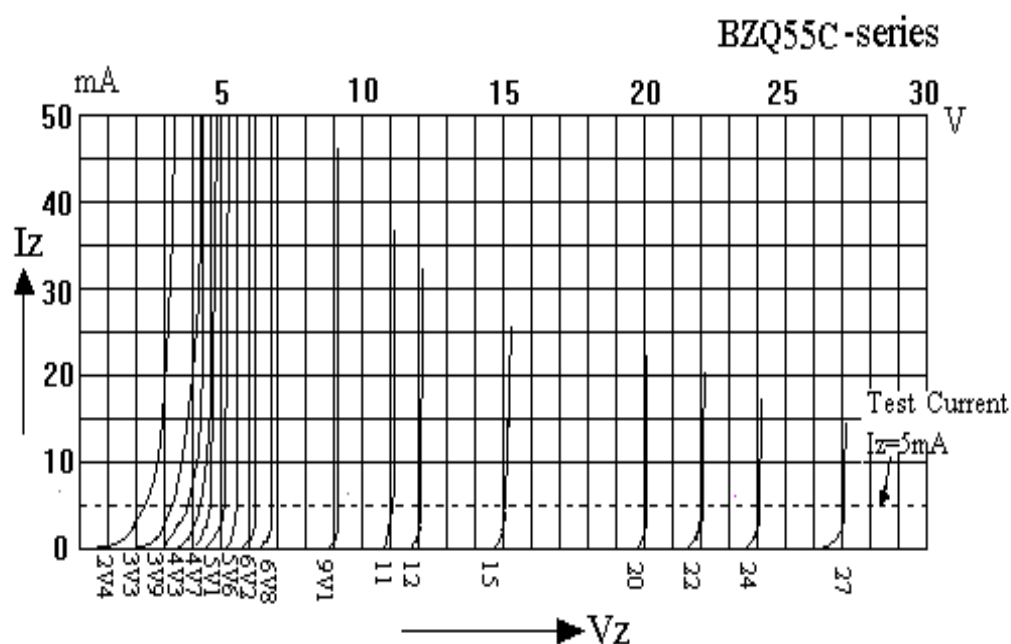
Cases: QUADRO MELF Molded Glass

Characteristic at $T_{amb}=25^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	—	—	0.3*	K/mW
Forward Voltage at $I_F=100\text{mA}$	V_F	—	—	1	V

*Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Breakdown characteristics



changes in the power dissipation
due to the ambient temperature.

