

DATA SHEET

BZQ5221B SERIES

SURFACE MOUNT ZENER DIODES

VOLTAGE 2.4 to 47 Volts

POWER 500 mWatts

QUADRO-MELF

Unit : inch (mm)

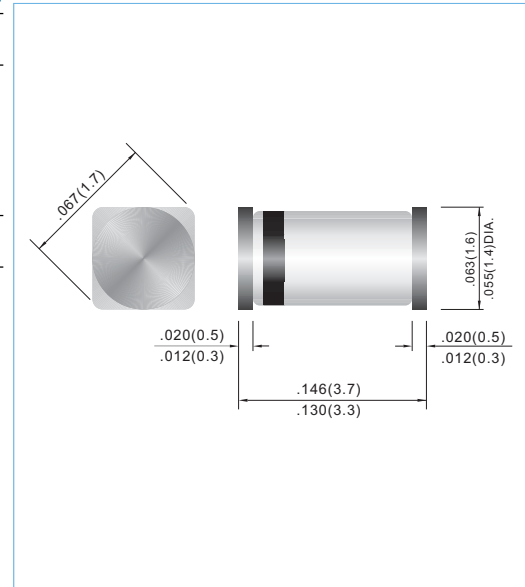
FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

- Case: Molded Glass QUADRO-MELF
- Terminals: Solderable per MIL-STD-202E, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.03 grams
- Mounting Position: Any
- Packing information

T/R - 2.5K per 7" plastic Reel



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P _{TOT}	500	mW
Junction Temperature	T _J	175	°C
Storage Temperature Range	T _S	-65 to +175	°C

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R _{thA}	--	--	0.3	K/mW
Forward Voltage at I _F = 100mA	V _F	--	--	1	V

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	uA	V
BZQ5221B	2.40	2.28	2.52	30	20.0	1200	1.00	100	1.0
BZQ5222B	2.50	2.38	2.63	30	20.0	1250	1.00	100	1.0
BZQ5223B	2.70	2.57	2.84	30	20.0	1300	1.00	75	1.0
BZQ5224B	2.80	2.66	2.94	30	20.0	1400	1.00	75	1.0
BZQ5225B	3.00	2.85	3.15	29	20.0	1600	1.00	50	1.0
BZQ5226B	3.30	3.14	3.47	28	20.0	1600	1.00	25	1.0
BZQ5227B	3.60	3.42	3.78	24	20.0	1700	1.00	15	1.0
BZQ5228B	3.90	3.71	4.10	23	20.0	1900	1.00	10	1.0
BZQ5229B	4.30	4.09	4.52	22	20.0	2000	1.00	5.0	1.0
BZQ5230B	4.70	4.47	4.94	19	20.0	1900	1.00	5.0	2.0
BZQ5231B	5.10	4.85	5.36	17	20.0	1600	1.00	5.0	2.0
BZQ5232B	5.60	5.32	5.88	11	20.0	1600	1.00	5.0	3.0
BZQ5233B	6.00	5.70	6.30	7	20.0	1600	1.00	5.0	3.5
BZQ5234B	6.20	5.89	6.51	7	20.0	1000	1.00	5.0	4.0
BZQ5235B	6.80	6.46	7.14	5	20.0	750	1.00	3.0	5.0
BZQ5236B	7.50	7.13	7.88	6	20.0	500	1.00	3.0	6.0
BZQ5237B	8.20	7.79	8.61	8	20.0	500	1.00	3.0	6.5
BZQ5238B	8.70	8.27	9.14	8	20.0	600	1.00	3.0	6.5
BZQ5239B	9.10	8.65	9.56	10	20.0	600	1.00	3.0	7.0
BZQ5240B	10.00	9.50	10.50	17	20.0	600	1.00	3.0	8.0
BZQ5241B	11.00	10.45	11.55	22	20.0	600	1.00	2.0	8.4
BZQ5242B	12.00	11.40	12.60	30	20.0	600	1.00	1.0	9.1
BZQ5243B	13.00	12.35	13.65	13	9.5	600	1.00	0.5	9.9
BZQ5244B	14.00	13.30	14.70	15	9.5	600	1.00	0.1	10.0
BZQ5245B	15.00	14.25	15.75	16	8.5	600	1.00	0.1	11.0
BZQ5246B	16.00	15.20	16.80	17	7.8	600	1.00	0.1	12.0
BZQ5247B	17.00	16.15	17.85	19	7.4	600	1.00	0.1	13.0
BZQ5248B	18.00	17.10	18.90	21	7.0	600	1.00	0.1	14.0
BZQ5249B	19.00	18.05	19.95	23	6.6	600	1.00	0.1	14.0
BZQ5250B	20.00	19.00	21.00	25	6.2	600	1.00	0.1	15.0
BZQ5251B	22.00	20.90	23.10	29	5.6	600	1.00	0.1	17.0
BZQ5252B	24.00	22.80	25.20	33	5.2	600	1.00	0.1	18.0
BZQ5253B	25.00	23.75	26.25	35	5.0	600	1.00	0.1	19.0
BZQ5254B	27.00	25.65	28.35	41	4.6	600	1.00	0.1	21.0
BZQ5255B	28.00	26.60	29.40	44	4.5	600	1.00	0.1	21.0
BZQ5256B	30.00	28.50	31.50	49	4.2	600	1.00	0.1	23.0
BZQ5257B	33.00	31.35	34.65	58	3.8	700	1.00	0.1	25.0
BZQ5258B	36.00	34.20	37.80	70	3.4	700	1.00	0.1	27.0
BZQ5259B	39.00	37.05	40.95	80	3.2	800	1.00	0.1	30.0
BZQ5260B	43.00	40.85	45.15	93	3.0	900	1.00	0.1	33.0
BZQ5261B	47.00	44.65	49.35	150	2.7	1000	1.00	0.1	36.0

Notes.

- STANDARD VOLTAGE TOLERANCE IS + 5% AND :
- SUFFIX " A " FOR + 3%
- SUFFIX " B " FOR + 5%
- SUFFIX " C " FOR + 10%
- SUFFIX " D " FOR + 20%

RATING AND CHARACTERISTIC CURVES

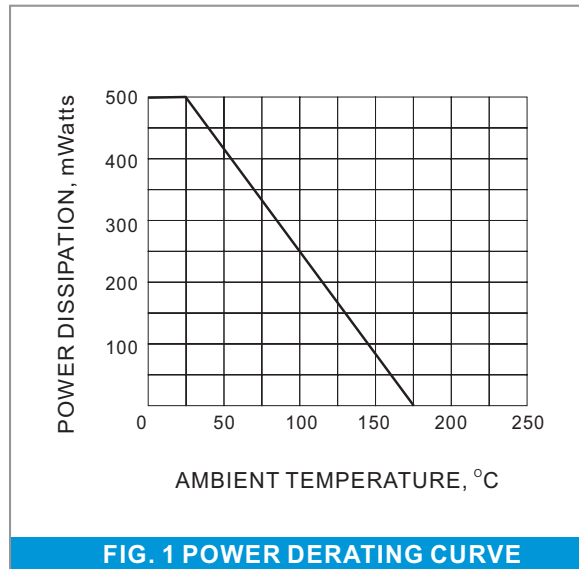


FIG. 1 POWER DERATING CURVE

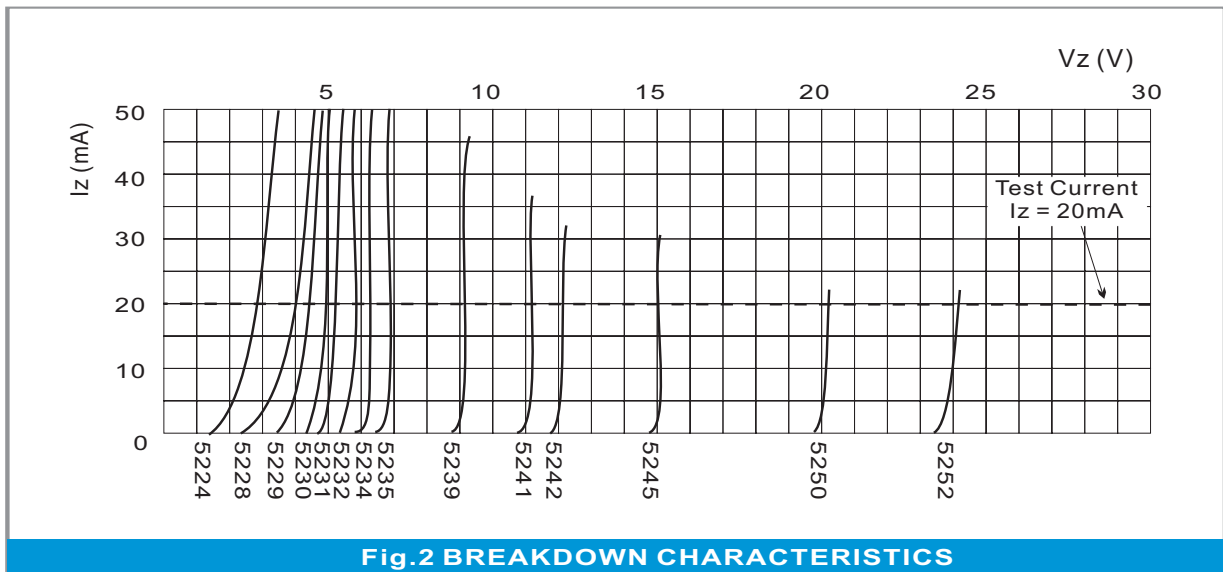


Fig.2 BREAKDOWN CHARACTERISTICS