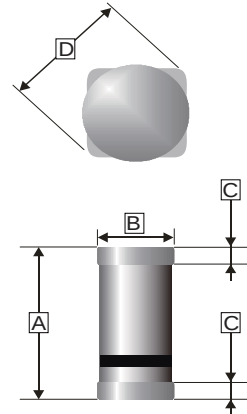


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

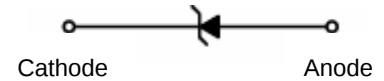
FEATURES

- Zener Voltage Range 2.2 to 39 Volts
- QUADRO Mini-MELF Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals are Readily Solderable
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity

QUADRO Mini-MELF



REF.	Millimeter	
	Min.	Max.
A	3.30	3.70
B	1.40	1.60
C	0.35	0.45
D	1.8 Typ.	



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Power Dissipation	P _D	500	mW
Operating Junction and Storage Temperature Range	T _J , T _{STG}	175, -65~175	°C

*These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Device Type	Tolerance	$V_Z @ I_{ZT}$ (Volts)		I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	$Z_{ZK} @ I_{ZK}$ (Ω) Max	I_{ZK} (mA)	$I_R @ V_R$ (μA) Max	V_R (Volts)
		V_Z (Min)	V_Z (Max)						
VLZ2V2	A	2.12	2.30	20	35	400	1	55	0.7
	B	2.22	2.41						
VLZ2V4	A	2.33	2.52	20	35	400	1	84	1
	B	2.43	2.63						
VLZ2V7	A	2.54	2.75	20	35	450	1	70	1
	B	2.69	2.91						
VLZ3V0	A	2.85	3.07	20	35	450	1	35	1
	B	3.01	3.22						
VLZ3V3	A	3.16	3.38	20	35	450	1	14	1
	B	3.32	3.53						
VLZ3V6	A	3.46	3.70	20	48	850	1	2.8	1
	B	3.60	3.85						
VLZ3V9	A	3.74	4.01	20	40	850	1	1.4	1
	B	3.89	4.16						
VLZ4V3	A	4.04	4.29	20	32	850	1	0.47	1
	B	4.17	4.43						
	C	4.30	4.57						
VLZ4V7	A	4.44	4.68	20	21	770	1	0.19	1
	B	4.55	4.80						
	C	4.68	4.93						
VLZ5V1	A	4.81	5.07	20	17	685	1	0.19	1.5
	B	4.94	5.20						
	C	5.09	5.37						
VLZ5V6	A	5.28	5.55	20	10.5	425	1	0.75	2.5
	B	5.45	5.73						
	C	5.61	5.91						
VLZ6V2	A	5.78	6.09	20	8.5	255	1	3.30	3.0
	B	5.96	6.27						
	C	6.12	6.44						
VLZ6V8	A	6.29	6.63	20	6.6	123	0.5	1.10	3.5
	B	6.49	6.83						
	C	6.66	7.01						
VLZ7V5	A	6.85	7.22	20	6.6	95	0.5	0.30	4.0
	B	7.07	7.45						
	C	7.29	7.67						
VLZ8V2	A	7.53	7.92	20	6.6	95	0.5	0.30	5.0
	B	7.78	8.19						
	C	8.03	8.45						
VLZ9V1	A	8.29	8.73	20	6.6	95	0.5	0.30	6.0
	B	8.57	9.01						
	C	8.83	9.30						
VLZ10V	A	9.12	9.59	20	6.6	95	0.5	0.11	7.0
	B	9.41	9.90						
	C	9.70	10.2						
VLZ11V	A	10.18	10.71	10	8.5	95	0.5	0.133	8.0
	B	10.50	11.05						
	C	10.82	11.38						

Device Type	Tolerance	V _Z @ I _{ZT} (Volts)		I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ω) Max	I _{ZK} (mA)	Z _{ZK} @ I _{ZK} (Ω) Max	I _R @ V _R (μA) Max	V _R (Volts)
		V _Z (Min)	V _Z (Max)						
VLZ12V	A	11.13	11.71	10	9.5	95	0.5	0.133	9.0
	B	11.44	12.03						
	C	11.74	12.35						
VLZ13V	A	12.11	12.75	10	11.4	95	0.5	0.133	10
	B	12.55	13.21						
	C	12.99	13.66						
VLZ15V	A	13.44	14.13	10	13.3	95	0.5	0.133	11
	B	13.89	14.62						
	C	14.35	15.09						
VLZ16V	A	14.80	15.57	10	15.2	132	0.5	0.133	12
	B	15.25	16.04						
	C	15.69	16.51						
VLZ18V	A	16.22	17.06	10	19.4	123	0.5	0.133	13
	B	16.82	17.70						
	C	17.42	18.33						
VLZ20V	A	18.02	18.96	10	23.5	170	0.5	0.133	15
	B	18.63	19.59						
	C	19.23	20.22						
	D	19.72	20.72						
VLZ22V	A	20.15	21.2	5	25.6	170	0.5	0.133	17
	B	20.64	21.71						
	C	21.08	22.17						
	D	21.52	22.63						
VLZ24V	A	22.05	23.18	5	29.0	170	0.5	0.133	19
	B	22.61	23.77						
	C	23.12	24.31						
	D	23.63	24.85						
VLZ27V	A	24.26	25.52	5	38.0	210	0.5	0.133	21
	B	24.97	26.26						
	C	25.63	26.95						
	D	26.29	27.64						
VLZ30V	A	26.99	28.39	5	46.0	210	0.5	0.133	23
	B	27.70	29.13						
	C	28.36	29.82						
	D	29.02	30.51						
VLZ33V	A	29.68	31.22	5	55.0	210	0.5	0.133	25
	B	30.32	31.88						
	C	30.90	32.50						
	D	31.49	33.11						
VLZ36V	A	32.14	33.79	5	63.0	210	0.5	0.133	27
	B	32.79	34.49						
	C	33.40	35.13						
	D	34.01	35.77						
VLZ39V	A	34.68	36.47	5	72.0	210	0.5	0.133	30
	B	35.36	37.19						
	C	36.00	37.85						
	D	36.63	38.52						

Notes:

1. **TOLERANCE AND VOLTAGE DESIGNATION**

The type numbers listed have zener voltage as shown.

2. **SPECIALS AVAILABLE INCLUDE**

Nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery, contact you nearest SeCoS representative.

3. **ZENER VOLTAGE (V_z) MEASUREMENT**

The zener voltage is measured under pulse conditions such that T_j is no more than 2°C above T_A .

4. **ZENER IMPEDANCE (Z_z) DERIVATION**

Zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an RMS value equal to 10% of the dc zener current (I_{ZT}) is superimposed to I_{ZT}

5. **WHEN ORDERING, PLEASE SPECIFY TOLERANCE A, B, C OR D**

RATINGS AND CHARACTERISTIC CURVES

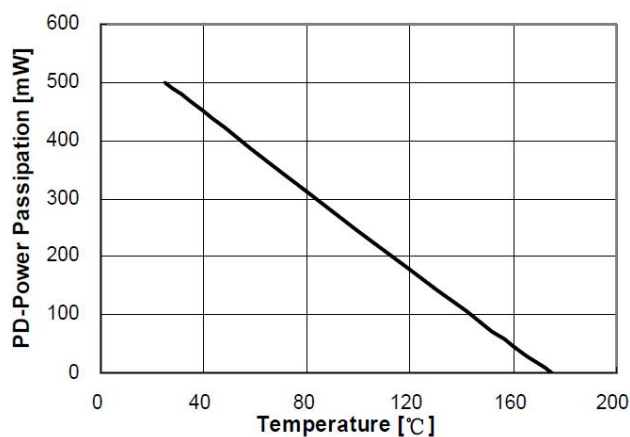


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

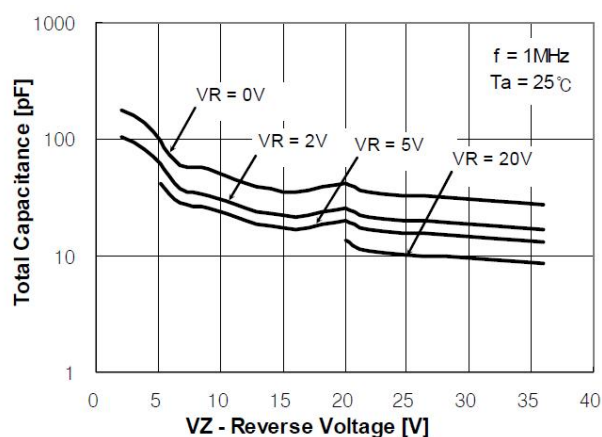


Figure 2. Total Capacitance

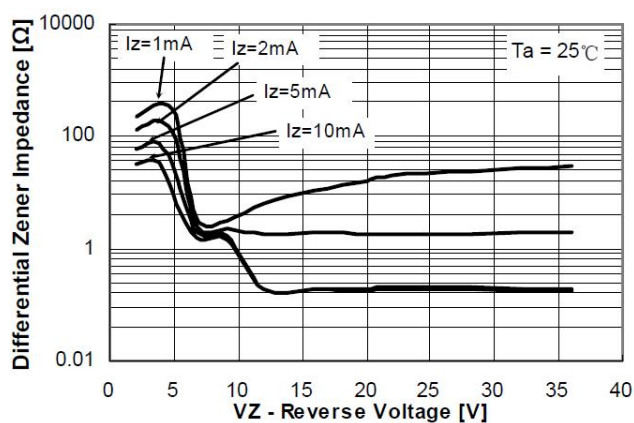


Figure 3. Differential Impedance vs. Zener Voltage

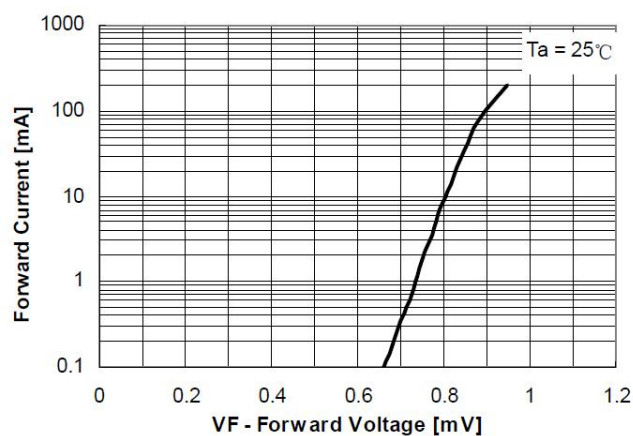


Figure 4. Forward Current vs. Forward Voltage

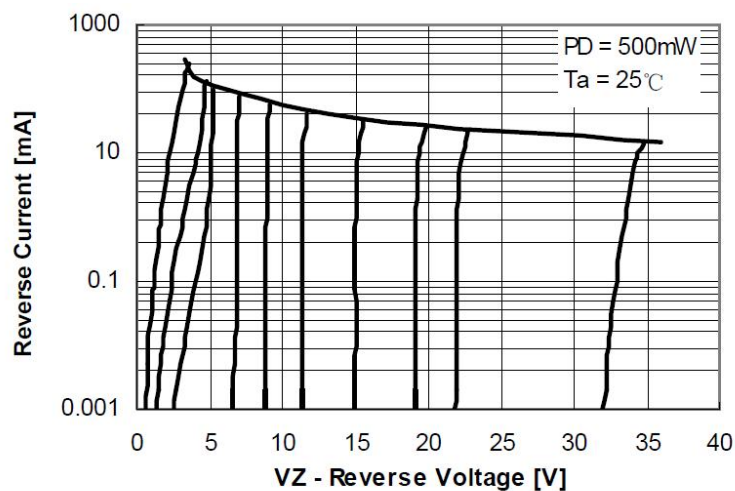


Figure 5. Reverse Current vs. Reverse Voltage