

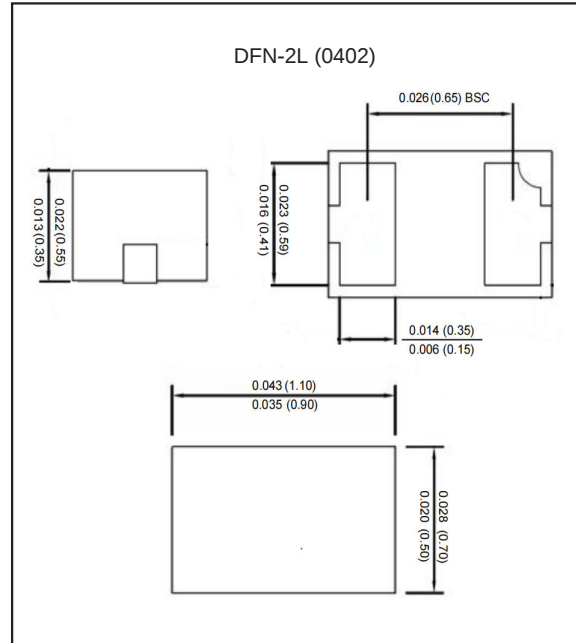
Features

- Zener Voltage 3.6V-36V.
- Epoxy Meets UL 94 V-0 Flammability Rating.
- High Conductance.
- Lead Free Finish/RoHS Compliant.
- Small package saves board space
- Compliant to Halogen-free.
- Suffix "-Q1" for AEC-Q101.

Mechanical data

- Case : DFN-2L(0402)
- Terminals :Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity : Cathode line denotes the cathode end

Package outline



Maximum ratings (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 10 \text{ mA}$	V_F			1	V
Power dissipation		P_D			100	mW
Maximum Regulator Current		I_{ZM}			P_D / V_Z	mA
Operating junction temperature range		T_J			150	$^{\circ}\text{C}$
Storage temperature range		T_{STG}	-55		+150	$^{\circ}\text{C}$

Electrical characteristics (at $T_A = 25^\circ\text{C}$ unless otherwise noted)

Part No.	Marking code	Zener voltage			Test current	Zener impedance				Leakage current	
		V _Z @ I _{ZT} (V)			I _{ZT}	Z _{ZT} (Ω)		Z _{ZK} (Ω)		I _R (μA)@V _R	
		min.	typ.	max.	mA	I _{ZT} (mA)	max.	I _{ZK} (mA)	max.	max	V _R (V)
MM42Z3V6AB-Q1	2W4	3.53	3.6	3.67	5	5	95	1.0	600	15	1.0
MM42Z3V9AB-Q1	2W5	3.82	3.9	3.98	5	5	95	1.0	600	10	1.0
MM42Z4V3AB-Q1	2W6	4.21	4.3	4.39	5	5	95	1.0	600	5	1.0
MM42Z4V7AB-Q1	2W7	4.61	4.7	4.79	5	5	78	1.0	500	1	1.0
MM42Z5V1AB-Q1	2W8	5.0	5.1	5.2	5	5	60	1.0	480	0.1	0.8
MM42Z5V6AB-Q1	2W9	5.49	5.6	5.71	5	5	40	1.0	400	0.1	1.0
MM42Z6V2AB-Q1	2WA	6.08	6.2	6.32	5	5	10	1.0	150	0.1	2.0
MM42Z6V8AB-Q1	2WB	6.66	6.8	6.94	5	5	8	1.0	80	0.1	3.0
MM42Z7V5AB-Q1	2WC	7.35	7.5	7.65	5	5	7	1.0	80	0.1	5.0
MM42Z8V2AB-Q1	2WD	8.04	8.2	8.36	5	5	7	1.0	80	0.1	6.0
MM42Z9V1AB-Q1	2WE	8.92	9.1	9.28	5	5	10	1.0	100	0.1	6.8
MM42Z10VAB-Q1	2WF	9.8	10	10.2	5	5	15	1.0	150	0.1	7.5
MM42Z11VAB-Q1	2WG	10.78	11	11.22	5	5	20	1.0	150	0.1	8.2
MM42Z12VAB-Q1	2WH	11.76	12	12.24	5	5	20	1.0	150	0.1	9.0
MM42Z13VAB-Q1	2WI	12.74	13	13.26	5	5	26	1.0	170	0.1	9.7
MM42Z15VAB-Q1	2WJ	14.7	15	15.3	5	5	30	1.0	200	0.1	11
MM42Z16VAB-Q1	2WK	15.68	16	16.32	5	5	40	1.0	200	0.1	12
MM42Z18VAB-Q1	2WL	17.64	18	18.36	5	5	50	1.0	225	0.1	14
MM42Z20VAB-Q1	2WM	19.6	20	20.4	5	5	55	1.0	225	0.1	15
MM42Z22VAB-Q1	2WN	21.56	22	22.44	5	5	55	1.0	250	0.1	17
MM42Z24VAB-Q1	2WO	23.52	24	24.48	5	5	70	1.0	250	0.1	18
MM42Z27VAB-Q1	2WP	26.46	27	27.54	5	5	80	1.0	300	0.1	20
MM42Z30VAB-Q1	2WQ	29.4	30	30.6	5	5	80	1.0	300	0.1	22
MM42Z33VAB-Q1	2WR	32.34	33	33.66	5	5	80	1.0	325	0.1	24
MM42Z36VAB-Q1	2WS	35.28	36	36.72	5	5	90	1.0	350	0.1	27

Rating and characteristic curves

Fig 1: Zener Breakdown Characteristics

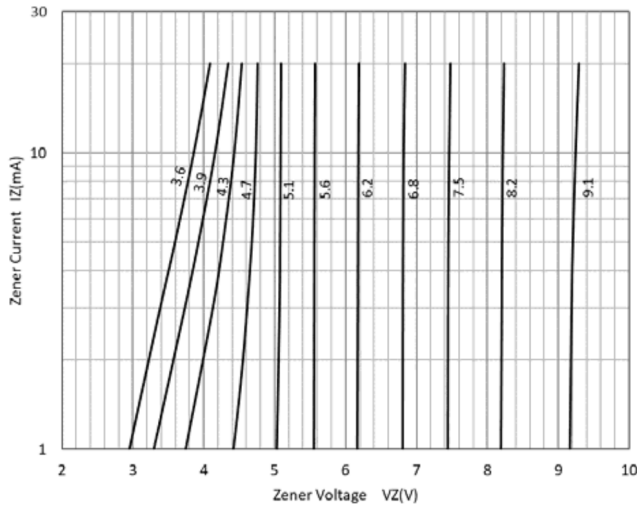


Fig 2: Zener Breakdown Characteristics

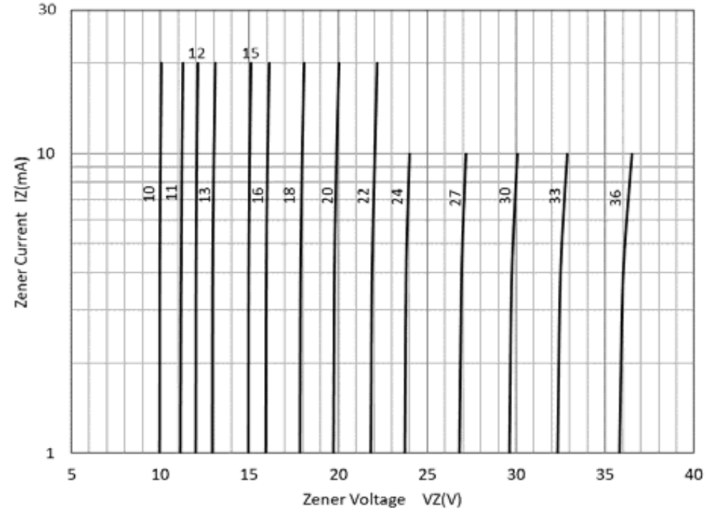


Fig 3: Typical Temperature Coefficient

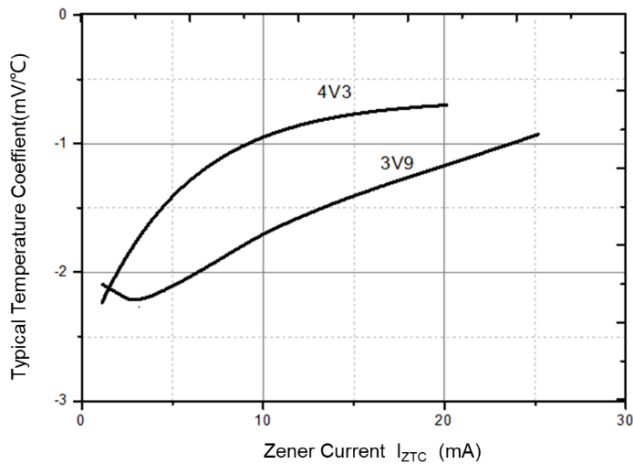
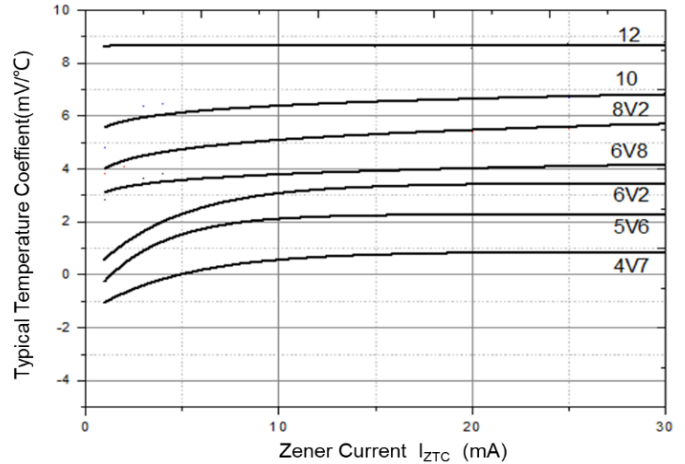


Fig 4: Typical Temperature Coefficient



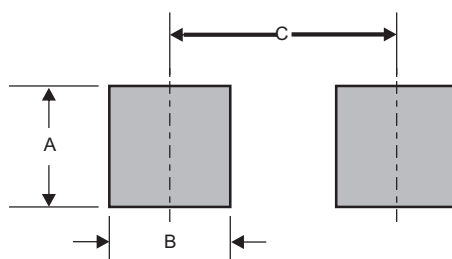
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking
MM42Z-Q1 Series	Page2

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
DFN-2L	0.020 (0.50)	0.014 (0.35)	0.026 (0.65)