

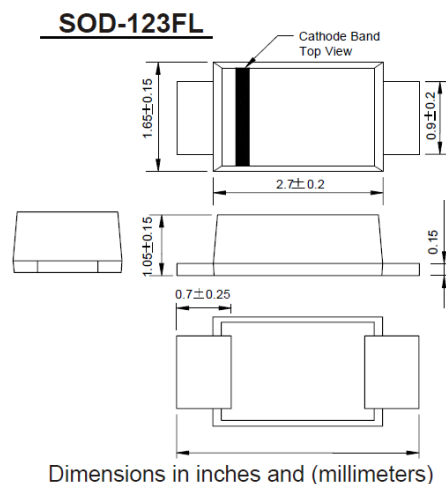
SMF4728A-SMF4764A

Features

- Low Zener Impedance
- Power Dissipation of 1W
- High Stability and High Reliability

Mechanical Data

- Cases :SOD-123FL Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation @TL=75°C ()	P_D	1.0	W
Forward Voltage @IF=200mA	V_f	1.5	V
Typical Thermal Resistance	R_{QJA}	32	°C/W
Storage temperature range	T_{STG}	-55-+150	°C
Operating Junction Temperature Range	T_J	-55-+150	°C

Note1: P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Type	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	VZ @ IZT	IZT	ZZT @ IZT	ZZK @ IZK	IZK	IR	@ VR	IZM
	(V)	(mA)	(W)	(W)	(mA)	(mA)	(V)	(mA)
SMF4728A	3.3	76.0	10	400	1.0	100	1.0	276
SMF4729A	3.6	69.0	10	400	1.0	100	1.0	252
SMF4730A	3.9	64.0	9.0	400	1.0	50	1.0	234
SMF4731A	4.3	58.0	9.0	400	1.0	10	1.0	217
SMF4732A	4.7	53.0	8.0	500	1.0	10	1.0	193
SMF4733A	5.1	49.0	7.0	550	1.0	10	1.0	178
SMF4734A	5.6	45.0	5.0	600	1.0	10	2.0	162
SMF4735A	6.2	41.0	2.0	700	1.0	10	3.0	146
SMF4736A	6.8	37.0	3.5	700	1.0	50	4.0	133
SMF4737A	7.5	34.0	4.0	700	0.5	50	5.0	121
SMF4738A	8.2	31.0	4.5	700	0.5	50	6.0	110
SMF4739A	9.1	28.0	5.0	700	0.5	50	7.0	100
SMF4740A	10	25.0	7.0	700	0.25	50	7.6	91
SMF4741A	11	23.0	8.0	700	0.25	50	8.4	83
SMF4742A	12	21.0	9.0	700	0.25	5.0	9.1	76
SMF4743A	13	19.0	10	700	0.25	5.0	9.9	69
SMF4744A	15	17.0	14	700	0.25	5.0	11.4	61

SMF4728A-SMF4764A

Type	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	VZ @ IZT (V)	IZT (mA)	ZZT @ IZT (W)	ZZK @ IZK (W)	IZK (mA)	IR (mA)	@ VR (V)	IZM (mA)
SMF4745A	16	15.5	16	700	0.25	5.0	12.2	57
SMF4746A	18	14.0	20	750	0.25	5.0	13.7	50
SMF4747A	20	12.5	22	750	0.25	5.0	15.2	45
SMF4748A	22	11.5	23	750	0.25	5.0	16.7	41
SMF4749A	24	10.5	25	750	0.25	5.0	18.2	38
SMF4750A	27	9.5	35	750	0.25	5.0	20.6	34
SMF4751A	30	8.5	40	1000	0.25	5.0	22.8	30
SMF4752A	33	7.5	45	1000	0.25	5.0	25.1	27
SMF4753A	36	7.0	50	1000	0.25	5.0	27.4	25
SMF4754A	39	6.5	60	1000	0.25	5.0	29.7	23
SMF4755A	43	6.0	70	1500	0.25	5.0	32.7	22
SMF4756A	47	5.5	80	1500	0.25	5.0	35.8	19
SMF4757A	51	5.0	95	1500	0.25	5.0	38.8	18
SMF4758A	56	4.5	110	2000	0.25	5.0	42.6	16
SMF4759A	62	4.0	125	2000	0.25	5.0	47.1	14
SMF4760A	68	3.7	150	2000	0.25	5.0	51.7	13
SMF4761A	75	3.3	175	2000	0.25	5.0	56.0	12
SMF4762A	82	3.0	200	3000	0.25	5.0	62.2	11
SMF4763A	91	2.8	250	3000	0.25	5.0	69.2	10
SMF4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

Characteristic Curves

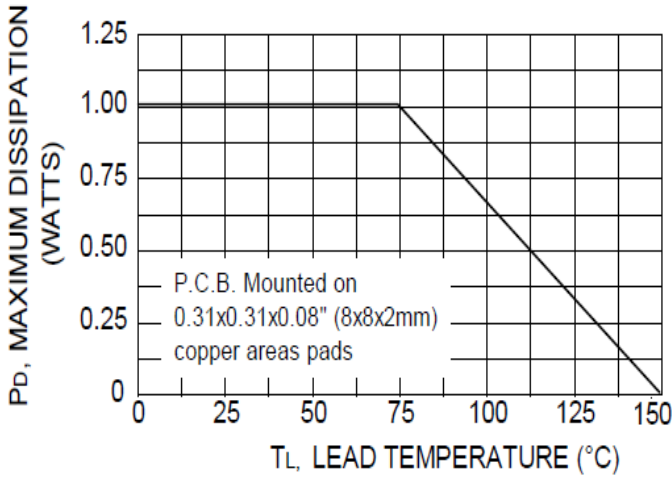


Fig. 1 MAXIMUM CONTINUOUS POWER DERATING

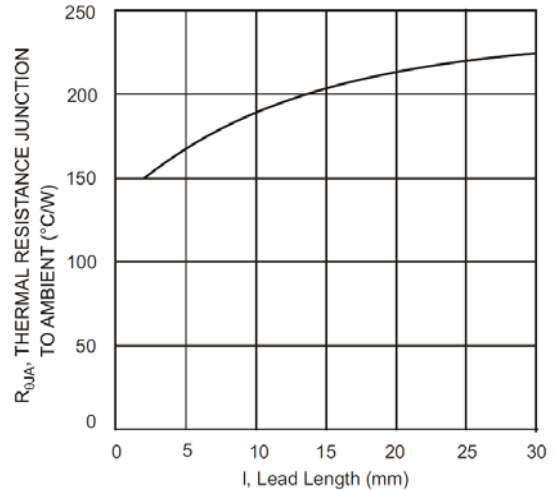


Fig. 2 Typical Thermal Resistance vs. Lead Length

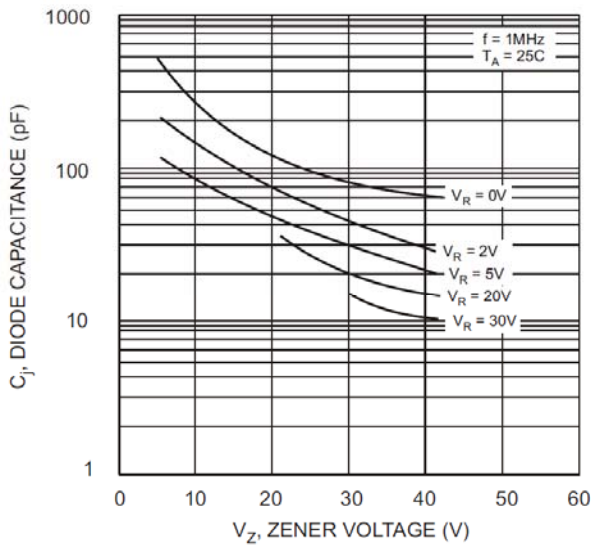


Fig.3, Junction Capacitance vs Zener Voltage

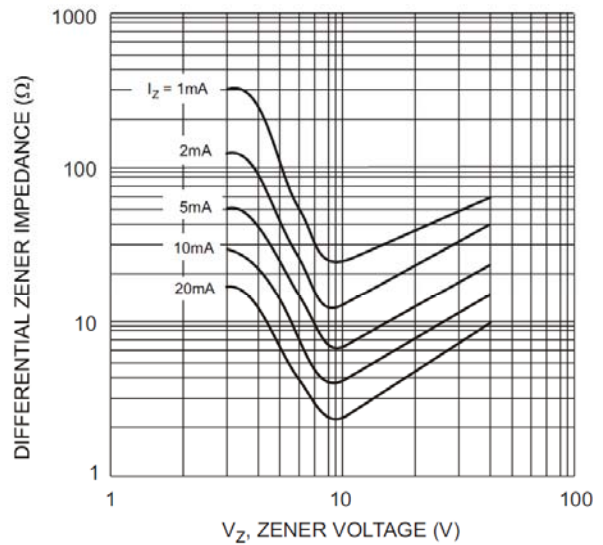


Fig. 4 Typical Zener Impedance vs. Zener Voltage