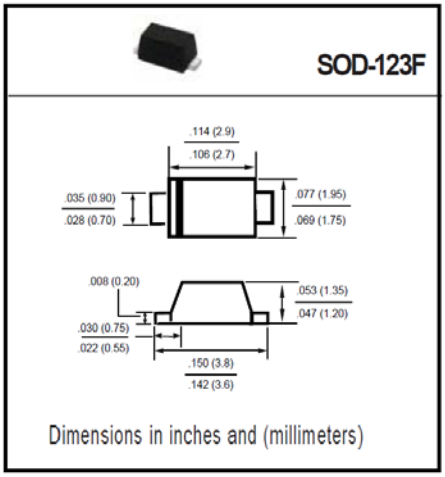
SFL4728-SFL4764

1W SURFACE MOUNT ZENER DIODE

Features

- For surface mounted applications
- Voltage range 3.3V to 100V
- High temperature soldering guaranteed:
  260 °C/10 seconds at terminals
- Low Zener impedance
- Low regulation factor
- Lead (Pb)-free component
- Standard voltage tolerance is 10 %, Suffix A ± 5 %.
- AEC-Q101 qualified



Applications

- Voltage stabilization

Mechanical Data

- Case: DO-123FL
- Packaging Codes/Options:
- TR / 3 k 7 " reel

Absolute Maximum Ratings $T_j = 25℃$

Parameter	Test Conditions	Symbol	Value	Unit
Power dissipation	T_{amb}=100℃	P_V	1	W
Junction temperature		T_j	150	℃
Storage temperature range		T_{stg}	−65...+150	℃

Electrical Characteristics $T_j = 25℃$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=0.2A		V_F			1.2	V

Electrical Characteristics (T_A =25℃ unless otherwise noted)

Type	Nominal Zener Voltage at I_{ZT} V_Z(1)	Test Current I_{ZT}	Maximum Dynamic Impedance			Maximum DC Reverse Leakage Current		Maximum Surge Current I_{RM}(2)
			Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}	I_{ZK}(1)	I_R	V_R	
	V	mA	Ω	Ω	mA	uA	V	mA pk
SFL4728	3.3	76.0	10.0	400	1.0	100	1.0	1380
SFL4729	3.6	69.0	10.0	400	1.0	100	1.0	1260
SFL4730	3.9	64.0	9.0	400	1.0	50	1.0	1190
SFL4731	4.3	58.0	9.0	400	1.0	10	1.0	1070
SFL4732	4.7	53.0	8.0	500	1.0	10	1.0	970
SFL4733	5.1	49.0	7.0	550	1.0	10	1.0	890
SFL4734	5.6	45.0	5.0	600	1.0	10	2.0	810
SFL4735	6.2	41.0	2.0	700	1.0	10	3.0	730
SFL4736	6.8	37.0	3.5	700	1.0	10	4.0	660
SFL4737	7.5	34.0	4.0	700	0.5	10	5.0	605
SFL4738	8.2	31.0	4.5	700	0.5	10	6.0	550
SFL4739	9.1	28.0	5.0	700	0. 5	10	7.0	500
SFL4740	10	25.0	7.0	700	0.25	10	7.6	454
SFL4741	11	23.0	8.0	700	0.25	5	8.4	414
SFL4742	12	21.0	9.0	700	0.25	5	9.1	380
SFL4743	13	19.0	10.0	700	0.25	5	9.9	344
SFL4744	15	17.0	14.0	700	0.25	5	11.4	305
SFL4745	16	15.5	16.0	700	0.25	5	12.2	285
SFL4746	18	14.0	20.0	750	0.25	5	13.7	250
SFL4747	20	12.5	22.0	750	0.25	5	15.2	225
SFL4748	22	11.5	23.0	750	0.25	5	16.7	205
SFL4749	24	10.5	25.0	750	0.25	5	18.2	190
SFL4750	27	9.5	35.0	750	0.25	5	20.6	170
SFL4751	30	8.5	40.0	1000	0.25	5	22.8	150
SFL4752	33	7.5	45.0	1000	0.25	5	25.1	135
SFL4753	36	7.0	50.0	1000	0.25	5	27.4	125
SFL4754	39	6.5	60.0	1000	0.25	5	29.7	115
SFL4755	43	6.0	70.0	1500	0.25	5	32.7	110
SFL4756	47	5.5	80.0	1500	0.25	5	35.8	95
SFL4757	51	5.0	95.0	1500	0.25	5	38.8	90
SFL4758	56	4.5	110	2000	0.25	5	42.6	80
SFL4759	62	4.0	125	2000	0.25	5	47.1	70
SFL4760	68	3.7	150	2000	0.25	5	51.7	65
SFL4761	75	3.3	175	2000	0.25	5	56.0	60
SFL4762	82	3.0	200	3000	0.25	5	62.2	55
SFL4763	91	2.8	250	3000	0.25	5	69.2	50
SFL4764	100	2.5	350	3000	0.25	5	76.0	45

Note: (1) Standard voltage tolerance is 10%, Suffix A ±5%

(2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC Method

(3) Maximum steady state power dissipation is 1.0 watt at T_T=75℃

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Fig. 1 - Maximum Continuous Power Dissipation

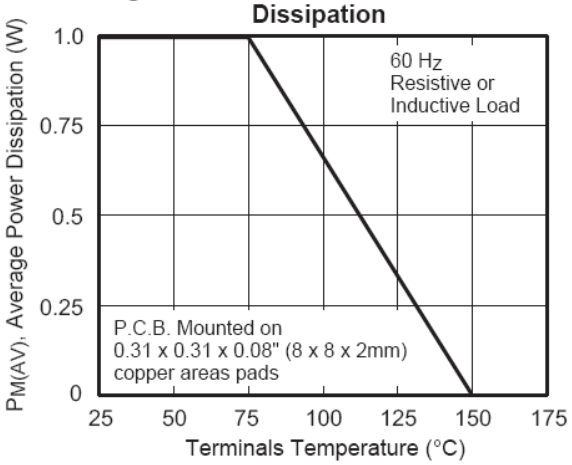


Fig. 2 - Typical Instantaneous Forward Characteristics for SML4763

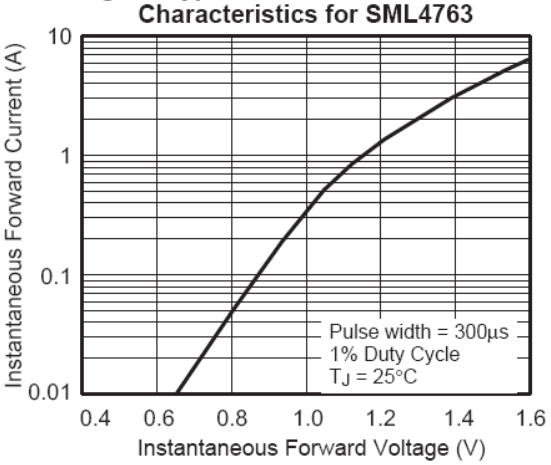


Fig. 3 - Typical Zener Impedance

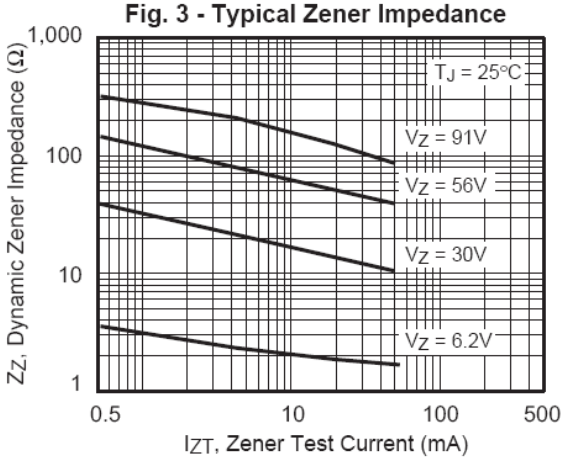


Fig. 4 - Typical Reverse Characteristics

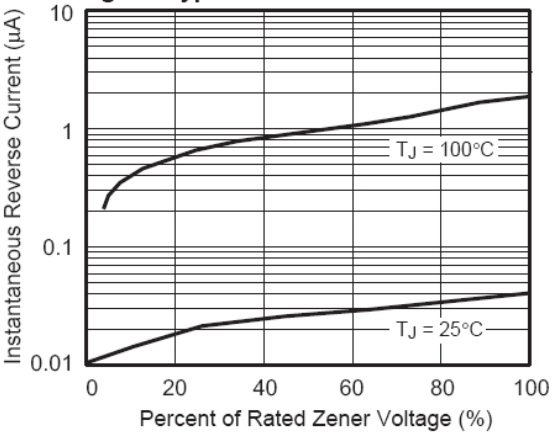


Fig. 5 - Typical Temperature Coefficients