



SURFACE MOUNT ZENER DIODE

SML4735A THRU SML4763A

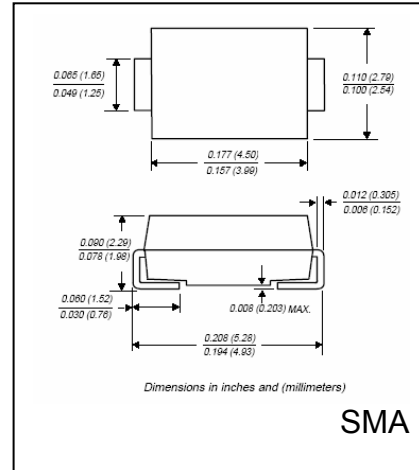
VOLTAGE RANGE 6.2 to 100 Volts
POWER DISSIPATION 1.0 Watt

FEATURES

- Planer die construction
- General Purpose, high power device
- 1W power dissipation
- 5% Tolerance
- Also available in a DO-41 package as the 1N4728A series
- Also available in a Glass Melf package as the ZM4728A series

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD 750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	VALUE	UNIT
Device Characteristics – See table			
Power dissipation (Note 1)	P_D	1.0	Watt
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	170	°C/W
Operating Junction Temperature Range	T_J	(-65 to +150)	°C
Storage Temperature Range	T_{STG}	(-65 to +150)	°C

Notes:

1. Provided terminals are kept at ambient temperature



RATINGS FOR SML4735A THRU SML4763A

Electrical Characteristics - All values at $T_A = 25^{\circ}\text{C}$ unless otherwise specified

Type Number	Marking Code	Nominal Zener Voltage	Test Current	Maximum Zener Impedance			Maximum Reverse Current		Maximum Surge Current (Note 1)	Maximum Forward Voltage @ 200 μA				
				V_Z	I_{ZT}	@ I_{ZT}	@ I_{ZT1}	I_{ZT1}			I_R	@ V_R	I_{RM}	V_F
				Volts	mA	Ohms		mA			μA	V	mA	Volts
SML4735A	6P2	6.2	41.0	2.0	700	1.0	50.0	3.0	730.0	1.2				
SML4736A	6P8	6.8	37.0	3.5	700	1.0	20.0	4.0	660.0	1.2				
SML4737A	7P5	7.5	34.0	4.0	700	0.05	10.0	5.0	605.0	1.2				
SML4738A	8P2	8.2	31.0	4.5	700	0.05	10.0	6.0	550.0	1.2				
SML4739A	9P1	9.1	28.0	5.0	700	0.05	10.0	7.0	500.0	1.2				
SML4740A	10	10	25.0	7.0	700	0.25	10.0	7.6	454.0	1.2				
SML4741A	11	11	23.0	8.0	700	0.25	5.0	8.4	414.0	1.2				
SML4742A	12	12	21.0	9.0	700	0.25	5.0	9.1	380.0	1.2				
SML4743A	13	13	19.0	10.0	700	0.25	5.0	9.9	344.0	1.2				
SML4744A	15	15	17.0	14.0	700	0.25	5.0	11.4	305.0	1.2				
SML4745A	16	16	15.5	16.0	700	0.25	5.0	12.2	285.0	1.2				
SML4746A	18	18	14.0	20.0	750	0.25	5.0	13.7	250.0	1.2				
SML4747A	20	20	12.5	22.0	750	0.25	5.0	15.2	225.0	1.2				
SML4748A	22	22	11.5	23.0	750	0.25	5.0	16.7	205.0	1.2				
SML4749A	24	24	10.5	25.0	750	0.25	5.0	18.2	190.0	1.2				
SML4750A	27	27	9.5	35.0	750	0.25	5.0	20.6	170.0	1.2				
SML4751A	30	30	8.5	40.0	1000	0.25	5.0	22.8	150.0	1.2				
SML4752A	33	33	7.5	45.0	1000	0.25	5.0	25.1	135.0	1.2				
SML4753A	36	36	7.0	50.0	1000	0.25	5.0	27.4	125.0	1.2				
SML4754A	39	39	6.5	60.0	1000	0.25	5.0	29.7	115.0	1.2				
SML4755A	43	43	6.0	70.0	1500	0.25	5.0	32.7	110.0	1.2				
SML4756A	47	47	5.5	80.0	1500	0.25	5.0	35.8	95.0	1.2				
SML4757A	51	51	5.0	95.0	1500	0.25	5.0	38.8	90.0	1.2				
SML4758A	56	56	4.5	110.0	20000	0.25	5.0	42.6	80.0	1.2				
SML4759A	62	62	4.0	125.0	2000	0.25	5.0	47.1	70.0	1.2				
SML4760A	68	68	3.7	150.0	2000	0.25	5.0	51.7	65.0	1.2				
SML4761A	75	75	3.3	175.0	2000	0.25	5.0	56	60.0	1.2				
SML4762A	82	82	3.0	200.0	3000	0.25	5.0	62.2	55.0	1.2				
SML4763A	91	91	2.0	250.0	3000	0.25	5.0	69.2	50.0	1.2				

Notes:

- Surge current is a non-repetitive, 8.3 mS pulse width square wave or equivalent sine wave superimposed on I_{ZT} per JEDEC method



CHARACTERISTIC CURVES SML4735A THRU SML4763A

