

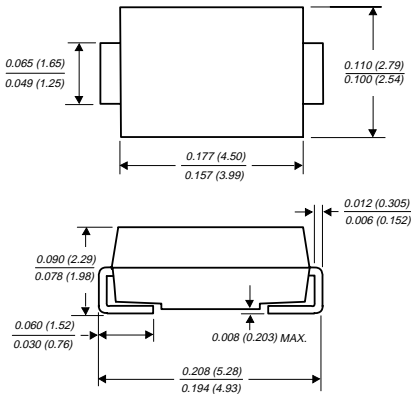
# SML4735 THRU SML4763A

## SURFACE MOUNT GLASS PASSIVATED ZENER

Zener Voltage - 6.2 to 91.0 Volts

Steady State Power - 1.0 Watt

### DO-214AC



Dimensions are in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Glass passivated chip junction
- ◆ Low Zener impedance
- ◆ Low regulation factor
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals



### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic over passivated junction

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes positive end (cathode)

**Mounting Position:** Any

**Weight:** 0.002 ounce, 0.064 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

OPERATING JUNCTION AND STORAGE TEMPERATURE RANGE: T<sub>J</sub>, T<sub>STG</sub>: -55°C to +150°C

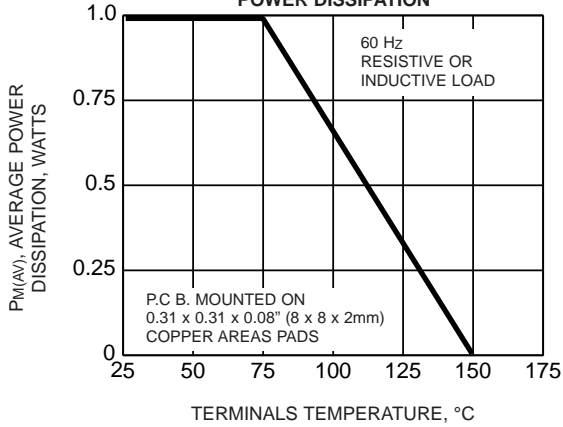
TYPE	DEVICE MARKING CODE	NOMINAL ZENER VOLTAGE at I <sub>ZT</sub> V <sub>Z</sub> (NOTE 1) (Volts)	TEST CURRENT I <sub>ZT</sub> (mA)	MAXIMUM DYNAMIC IMPEDANCE			MAXIMUM DC REVERSE LEAKAGE CURRENT		MAXIMUM SURGE CURRENT (NOTE 2) I <sub>RM</sub> (mApk)	MAXIMUM FORWARD VOLTAGE at 200mA V <sub>F</sub> (Volts)
				Z <sub>zT</sub> at I <sub>ZT</sub> (Ohms)	Z <sub>zK</sub> at I <sub>ZK</sub> (Ohms)	(NOTE 1) I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	V <sub>R</sub> (Volts)		
SML4735	6P2	6.2	41.0	2.0	700	1.0	50.0	3.0	730.0	1.2
SML4736	6P8	6.8	37.0	3.5	700	1.0	20.0	4.0	660.0	1.2
SML4737	7P5	7.5	34.0	4.0	700	0.5	10.0	5.0	605.0	1.2
SML4738	8P2	8.2	31.0	4.5	700	0.5	10.0	6.0	550.0	1.2
SML4739	9P1	9.1	28.0	5.0	700	0.5	10.0	7.0	500.0	1.2
SML4740	10	10	25.0	7.0	700	0.25	10.0	7.6	454.0	1.2
SML4741	11	11	23.0	8.0	700	0.25	5.0	8.4	414.0	1.2
SML4742	12	12	21.0	9.0	700	0.25	5.0	9.1	380.0	1.2
SML4743	13	13	19.0	10.0	700	0.25	5.0	9.9	344.0	1.2
SML4744	15	15	17.0	14.0	700	0.25	5.0	11.4	305.0	1.2
SML4745	16	16	15.5	16.0	700	0.25	5.0	12.2	285.0	1.2
SML4746	18	18	14.0	20.0	750	0.25	5.0	13.7	250.0	1.2
SML4747	20	20	12.5	22.0	750	0.25	5.0	15.2	225.0	1.2
SML4748	22	22	11.5	23.0	750	0.25	5.0	16.7	205.0	1.2
SML4749	24	24	10.5	25.0	750	0.25	5.0	18.2	190.0	1.2
SML4750	27	27	9.5	35.0	750	0.25	5.0	20.6	170.0	1.2
SML4751	30	30	8.5	40.0	1000	0.25	5.0	22.8	150.0	1.2
SML4752	33	33	7.5	45.0	1000	0.25	5.0	25.1	135.0	1.2
SML4753	36	36	7.0	50.0	1000	0.25	5.0	27.4	125.0	1.2
SML4754	39	39	6.5	60.0	1000	0.25	5.0	29.7	115.0	1.2
SML4755	43	43	6.0	70.0	1500	0.25	5.0	32.7	110.0	1.2
SML4756	47	47	5.5	80.0	1500	0.25	5.0	35.8	95.0	1.2
SML4757	51	51	5.0	95.0	1500	0.25	5.0	38.8	90.0	1.2
SML4758	56	56	4.5	110.0	2000	0.25	5.0	42.6	80.0	1.2
SML4759	62	62	4.0	125.0	2000	0.25	5.0	47.1	70.0	1.2
SML4760	68	68	3.7	150.0	2000	0.25	5.0	51.7	65.0	1.2
SML4761	75	75	3.3	175.0	2000	0.25	5.0	56.0	60.0	1.2
SML4762	82	82	3.0	200.0	3000	0.25	5.0	62.2	55.0	1.2
SML4763	91	91	2.0	250.0	3000	0.25	5.0	69.2	50.0	1.2

#### NOTES:

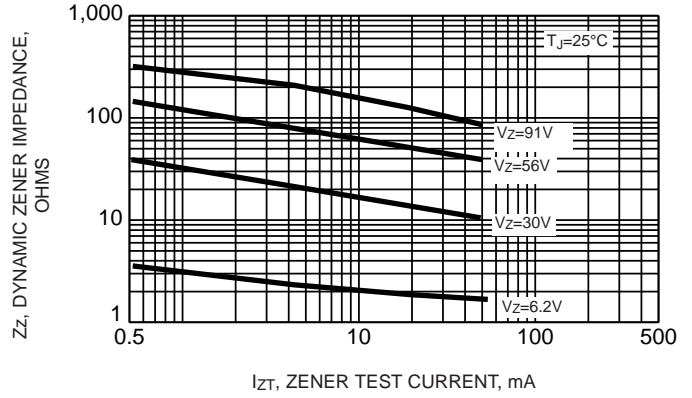
- (1) Standard voltage tolerance is 10%, Suffix A ± 5%
- (2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I<sub>ZT</sub> per JEDEC Method
- (3) Maximum steady state power dissipation is 1.0 watt at T<sub>T</sub>=75°C

# RATINGS AND CHARACTERISTIC CURVES SML4735 THRU SML4763A

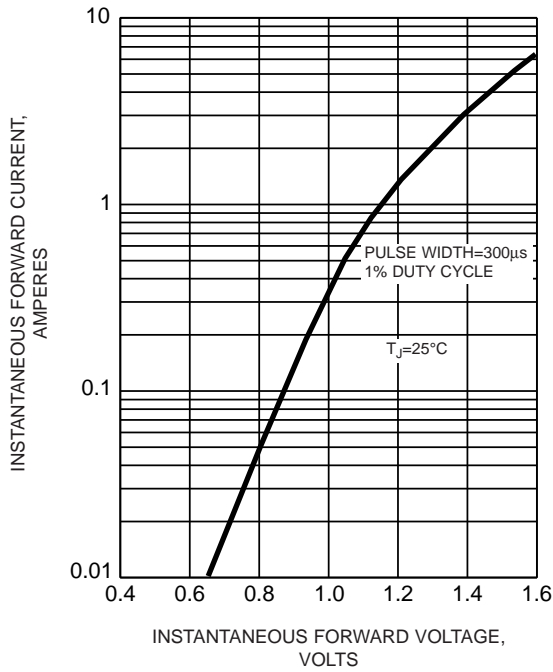
**FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION**



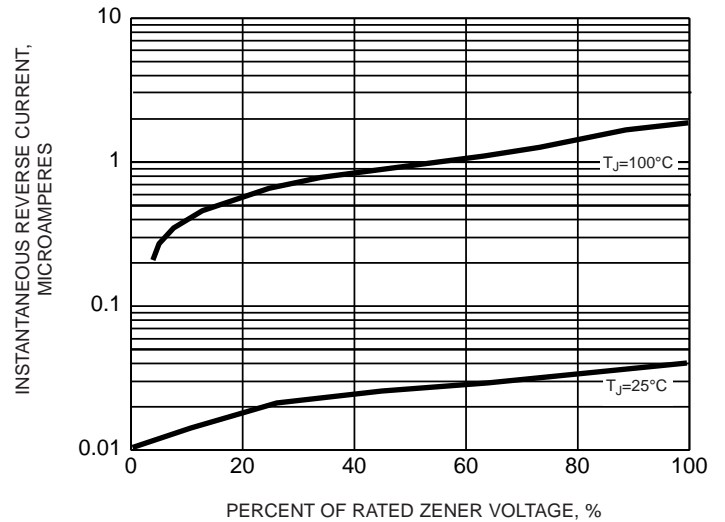
**FIG. 2 - TYPICAL ZENER IMPEDANCE**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS FOR SML4763**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL TEMPERATURE COEFFICIENTS**

