

SURFACE MOUNT ZENER SILICON RECTIFIER
VOLTAGE RANGE - 6.2 TO 91.0 Volts Steady State Power- 1.0 Watt

FEATURES

- * Plastic package has underwriters laboratory
- * Excellent clamping capability
- * Low zener impedance
- * Low regulation factor

MECHANICAL DATA

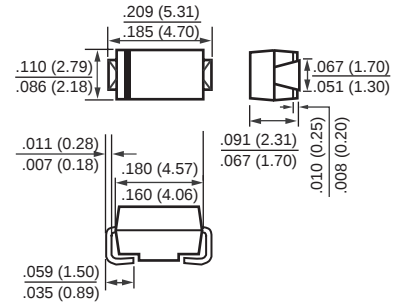
- * Epoxy : Device has UL flammability classification 94V-0

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

SMX



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICE

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

TYPE	NOMINAL ZENER VOLTAGE at I _{ZT} V _Z (NOTE 1) (Volts)	TEST CURRENT I _{ZT} (mA)	MAXIMUM DYNAMIC IMPEDANCE			MAXIMUM DC REVERSE LEAKAGE CURRENT		MAXIMUM SURGE CURRENT (NOTE 2) I _{RM} (mApk)	MAXIMUM FORWARD VOLTAGE at 200mA V _F (Volts)
			Z _{zT} at I _{ZT} (Ohms)	Z _{zK} at (Ohms)	(NOTE 1) I _{zK} (mA)	I _R (uA)	V _R (Volts)		
FM4735W	6.2	41.0	2.0	700	1.0	50.0	3.0	730.0	1.2
FM4736W	6.8	37.0	3.5	700	1.0	10.0	4.0	660.0	1.2
FM4737W	7.5	34.0	4.0	700	0.5	10.0	5.0	605.0	1.2
FM4738W	8.2	31.0	4.5	700	0.5	10.0	6.0	550.0	1.2

TYPE	NOMINAL ZENER VOLTAGE at I _{ZT} V _Z (NOTE 1) (Volts)	TEST CURRENT I _{ZT} (mA)	MAXIMUM DYNAMIC IMPEDANCE			MAXIMUM DC REVERSE LEAKAGE CURRENT		MAXIMUM SURGE CURRENT (NOTE 2) I _{RM} (mA _{pk})	MAXIMUM FORWARD VOLTAGE at 200mA V _F (Volts)
			Z _{ZT} at I _{ZT} (Ohms)	Z _{ZK} at (Ohms)	(NOTE 1) I _{ZK} (mA)	I _R (uA)	V _R (Volts)		
FM4739W	9.1	28.0	5.0	700	0.5	10.0	7.0	500.0	1.2
FM4740W	10	25.0	7.0	700	0.25	10.0	7.6	454.0	1.2
FM4741W	11	23.0	8.0	700	0.25	5.0	8.4	414.0	1.2
FM4742W	12	21.0	9.0	700	0.25	5.0	9.1	380.0	1.2
FM4743W	13	19.0	10.0	700	0.25	5.0	9.9	344.0	1.2
FM4744W	15	17.0	14.0	700	0.25	5.0	11.4	305.0	1.2
FM4745W	16	15.5	16.0	700	0.25	5.0	12.2	285.0	1.2
FM4746W	18	14.0	20.0	750	0.25	5.0	13.7	250.0	1.2
FM4747W	20	12.5	22.0	750	0.25	5.0	15.2	225.0	1.2
FM4748W	22	11.5	23.0	750	0.25	5.0	16.7	205.0	1.2
FM4749W	24	10.5	25.0	750	0.25	5.0	18.2	190.0	1.2
FM4750W	27	9.5	35.0	750	0.25	5.0	20.6	170.0	1.2
FM4751W	30	8.5	40.0	1000	0.25	5.0	22.8	150.0	1.2
FM4752W	33	7.5	45.0	1000	0.25	5.0	25.1	135.0	1.2
FM4753W	36	7.0	50.0	1000	0.25	5.0	27.4	125.0	1.2
FM4754W	39	6.5	60.0	1000	0.25	5.0	29.7	115.0	1.2
FM4755W	43	6.0	70.0	1500	0.25	5.0	32.7	110.0	1.2
FM4756W	47	5.5	80.0	1500	0.25	5.0	35.8	95.0	1.2
FM4757W	51	5.0	95.0	1500	0.25	5.0	38.8	90.0	1.2
FM4758W	56	4.5	110.0	2000	0.25	5.0	42.6	80.0	1.2
FM4759W	62	4.0	125.0	2000	0.25	5.0	47.1	70.0	1.2
FM4760W	68	3.7	150.0	2000	0.25	5.0	51.7	65.0	1.2
FM4761W	75	3.3	175.0	2000	0.25	5.0	56.0	60.0	1.2
FM4762W	82	3.0	200.0	3000	0.25	5.0	62.2	55.0	1.2
FM4763W	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": $\pm 5\%$

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°C

RATING AND CHARACTERISTIC CURVES (FM4735W THRU FM4763W)

FIG. 1 - MAXIMUM CONTINUOUS POWER DISSIPATION

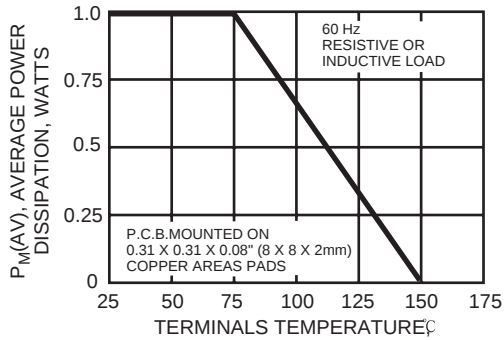


FIG. 2 - TYPICAL ZENER IMPEDANCE

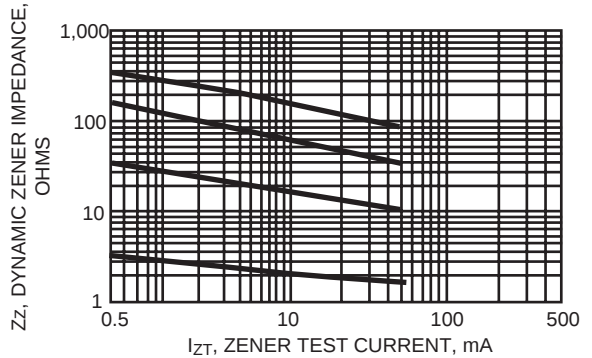


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS FOR FM4763W

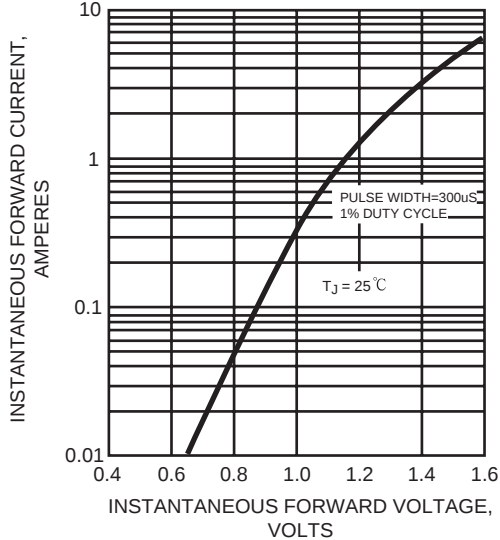


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

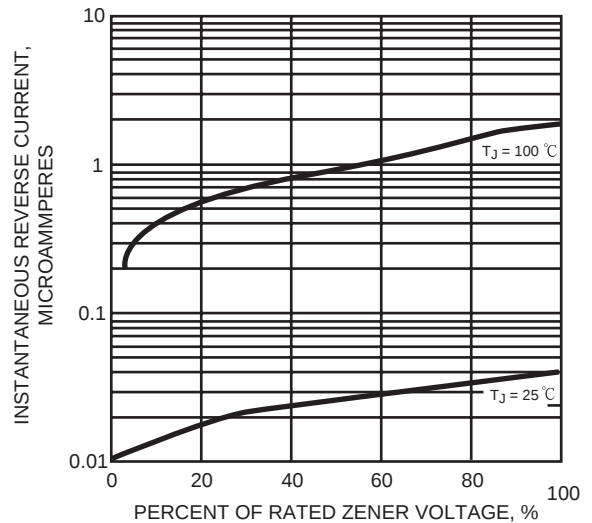


FIG. 5 - TYPICAL TEMPERATURE COEFFICIENTS

