

# SZ15D2 - SZ15E8

# SURFACE MOUNT SILICON ZENER DIODES

**V<sub>Z</sub> : 220 - 380 Volts**

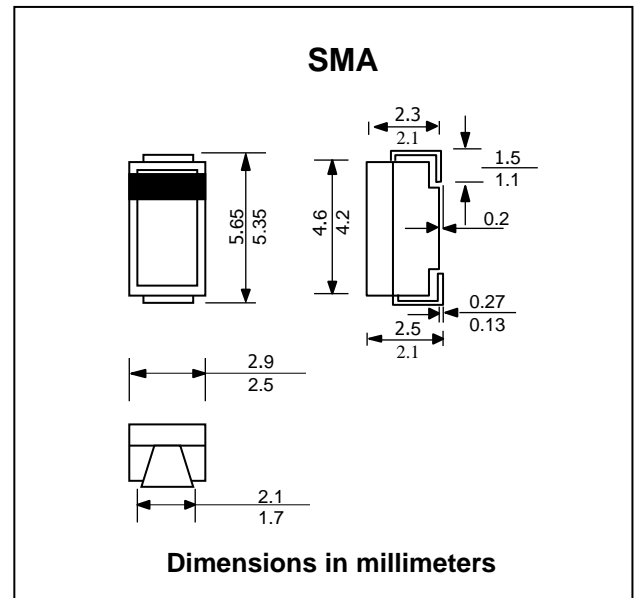
**P<sub>D</sub> : 1 Watt**

### FEATURES :

- \* Complete Voltage Range 220 to 380 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* Pb / RoHS Free

### MECHANICAL DATA

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.060 gram (Approximately)



### MAXIMUM RATINGS ( Rating at 25 °C ambient temperature unless otherwise specified)

Rating	Symbol	Value	Unit
DC Power Dissipation at T <sub>L</sub> = 75 °C (Note1)	P <sub>D</sub>	1.0	W
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	2.0	V
Junction Temperature Range	T <sub>J</sub>	- 55 to + 150	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 150	°C

### ELECTRICAL CHARACTERISTICS (Ta = 25 °C unless otherwise specified)

Type (Note 2)	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
	V <sub>Z</sub> @ I <sub>ZT</sub> (V)	I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> @ V <sub>R</sub> (μA)	V <sub>R</sub> (V)	I <sub>ZM</sub> (mA)	I <sub>RM</sub> <sup>(3)</sup> (mApk)
SZ15D2	220	1.00	1600	8000	0.25	5.0	167.2	4.0	20.0
SZ15D4	240	0.93	1800	8500	0.25	5.0	182.4	3.8	18.5
SZ15D5	250	0.90	2000	9000	0.25	5.0	190	3.6	18.0
SZ15D7	270	0.82	2100	9000	0.25	5.0	205	3.3	16.5
SZ15E0	300	0.75	2300	9500	0.25	5.0	228	3.0	15.0
SZ15E3	330	0.70	2500	9500	0.25	5.0	250	2.8	13.0
SZ15E8	380	0.60	2700	9500	0.25	5.0	288	2.4	12.0

#### Notes :

- (1) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.
- (2) The type number listed have a standard tolerance on the nominal zener voltage of ±5%, altered the fourth number of type from " 5 " for ±5% tolerance to be " 0 " for ±10% tolerance.
- (3) 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.
- (4) " SZ " will be omitted in marking on the diode.