

# SZ45D7 - SZ45E3

# SURFACE MOUNT SILICON ZENER DIODES

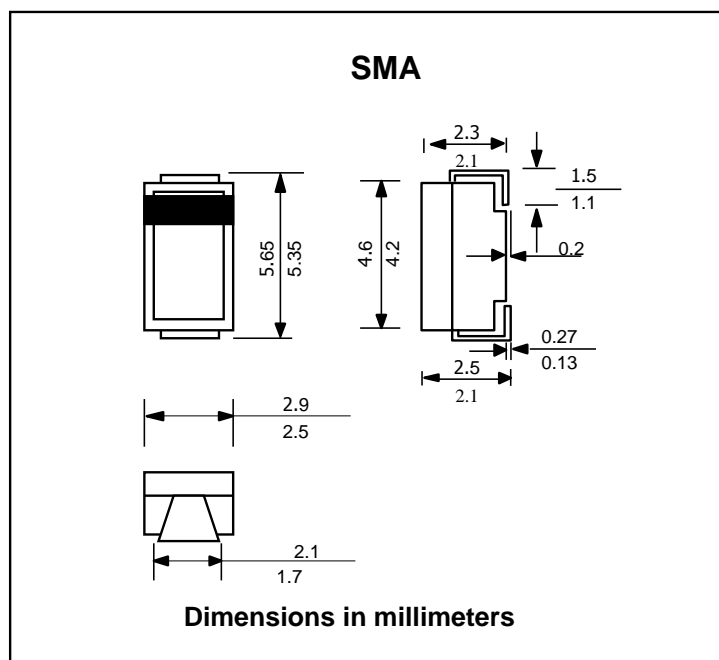
**V<sub>Z</sub> : 270 - 330 Volts**  
**P<sub>D</sub> : 2 Watts**

## FEATURES :

- \* Complete Voltage Range 270 to 330 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
- \* Lead : Lead formed for Surface mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any



## 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 (Note 1)	P <sub>D</sub>	2.0	W
Junction Temperature Range	T <sub>J</sub>	- 55 to + 150	°C
Storage Temperature Range	T <sub>s</sub>	- 55 to + 150	°C

### Note :

(1) T<sub>L</sub> = Lead temperature at 5.0 mm<sup>2</sup> ( 0.013 mm thick ) copper land areas.

## ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>	I <sub>ZM</sub>	
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA) (V)	(mA)	
SZ45D7	270	1.6	2200	8500	0.25	0.5 205	7	
SZ45E0	300	1.5	2200	9000	0.25	0.5 228	6	
SZ45E3	330	1.4	2300	9000	0.25	0.5 250	5.4	

### Notes :

- ( 1 ) The type number listed have a standard tolerance on the nominal zener voltage of ± 5.0%, altered the fourth number of type from " 5 " for ± 5.0% tolerance to be " 0 " for ± 10% tolerance.
- ( 2 ) " SZ " will be omitted in marking on the diode.

RATING AND CHARACTERISTIC CURVES ( SZ45D7 - SZ45E3 )

Fig 1. TYPICAL THERMAL RESPONSE L

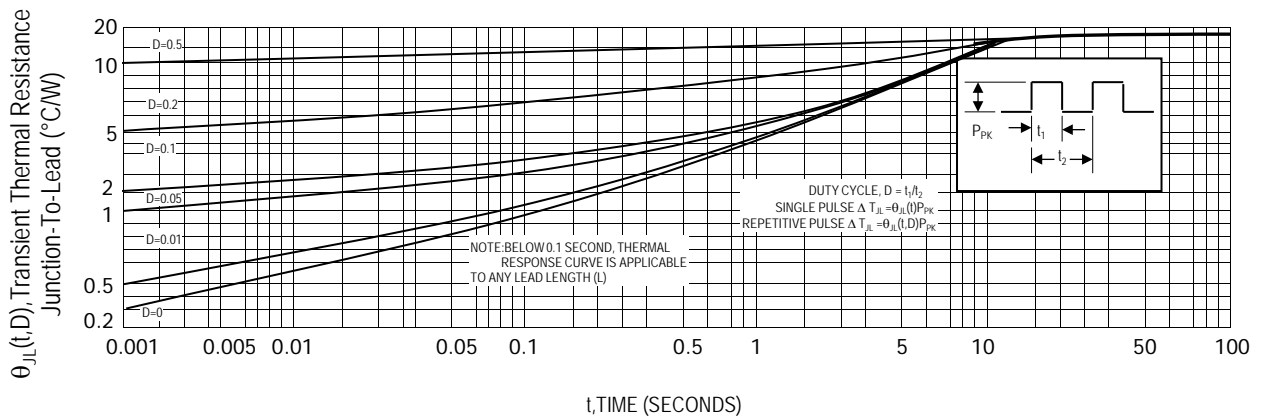


Fig.2 MAXIMUM SURGE POWER

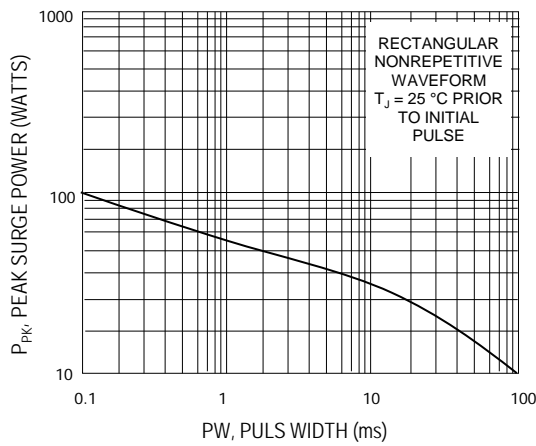
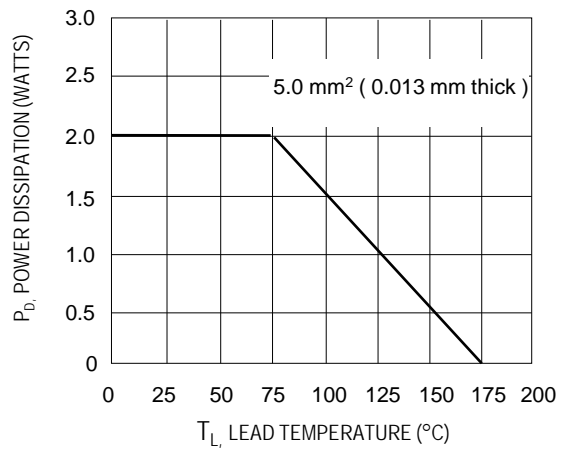


Fig. 3 POWER TEMPERATURE DERATING CURVE



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [EIC Semiconductor](#) manufacturer:*

Other Similar products are found below :

[RKZ13B2KG#P1](#) [RKZ5.6B2KJ#R1](#) [DL5234B](#) [EDZTE6113B](#) [1N4682](#) [1N4691](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#)  
[1N5241B](#) [1N5365B](#) [1N5369B](#) [1N747A](#) [1N959B](#) [1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [NTE5121A](#) [NTE5147A](#) [NTE5152A](#) [NTE5155A](#)  
[NTE5164A](#) [JANS1N4974US](#) [1N4692](#) [1N4700](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#) [1N4737A](#) [1N4745ARL](#) [1N4752A](#) [1N4752ARL](#)  
[1N4760ARL](#) [1N5221B](#) [1N5231B-TR](#) [1N5236B](#) [1N5241BTR](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5925B-TP](#)