

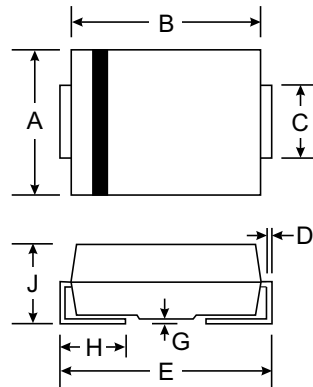
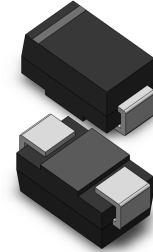
**VOLTAGE RANGE: 10 - 68V**  
**POWER: 1.5Watts**

### Features

- Glass passivated
- High maximum operating temperature
- Low leakage current
- Excellent stability
- UL 94V-O classified plastic package
- Zener working voltage range: 10 to 68 V for 21 types
- Supplied in 12 mm embossed tape.

### Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

### Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$P_{tot}$	total power dissipation	$T_{tp} = 75^\circ\text{C}$ ; see Fig.2	–	4.0	W
		$T_{amb} = 25^\circ\text{C}$ ; see Fig.2; device mounted on an $\text{Al}_2\text{O}_3$ printed-circuit board; see Fig.5	–	1.5	W
$P_{ZSM}$	non-repetitive peak reverse power dissipation	$t_p = 100 \mu\text{s}$ ; square pulse; $T_j = 25^\circ\text{C}$ prior to surge; see Fig.3	–	600	W
$T_{stg}$	storage temperature		–65	+175	$^\circ\text{C}$
$T_j$	junction temperature		–65	+175	$^\circ\text{C}$



**ELECTRICAL CHARACTERISTICS**

**Total series**

T<sub>j</sub> = 25 °C unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MAX.	UNIT
V <sub>F</sub>	forward voltage	I <sub>F</sub> = 0.5 A	1.2	V

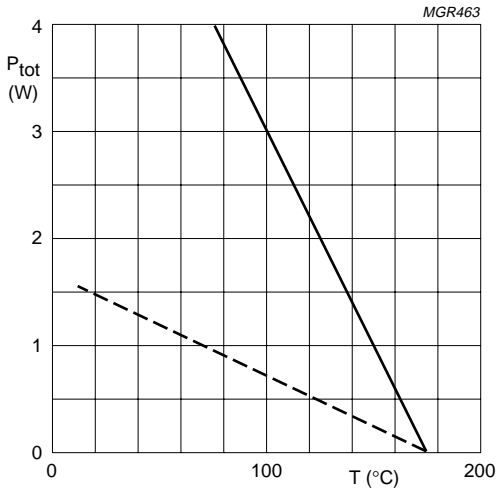
**Per type**

T<sub>j</sub> = 25 °C unless otherwise specified.

DEVICE	NOMINAL ZENER VOLTAGE	TEST CURRENT	ZENER IMPEDANCE (max)			REVERSE LEAKAGE CURRENT (max)		
	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> (Ω)	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)	V <sub>R</sub> (V)	Max DC Zener Current I <sub>ZM</sub> (mAdc)
PSMA5925B	10	37.5	4.5	500	0.25	10.0	8.0	150
PSMA5926B	11	34.1	5.5	550	0.25	4.0	8.4	136
PSMA5927B	12	31.2	6.5	550	0.25	3.0	9.1	125
PSMA5928B	13	28.8	8.0	600	0.25	1.0	9.9	115
PSMA5929B	15	25.0	9.0	650	0.25	0.5	11.4	100
PSMA5930B	16	23.4	10	650	0.25	0.5	12.2	94
PSMA5931B	18	20.8	12	650	0.25	0.5	13.7	83
PSMA5932B	20	18.7	14	650	0.25	0.5	15.2	75
PSMA5933B	22	17.0	17.5	650	0.25	0.5	16.7	68
PSMA5934B	24	15.6	19	700	0.25	0.5	18.2	63
PSMA5935B	27	13.9	23	700	0.25	0.5	20.6	56
PSMA5936B	30	12.5	26	750	0.25	0.5	22.8	50
PSMA5937B	33	11.4	33	800	0.25	0.5	25.1	45
PSMA5938B	36	10.4	38	850	0.25	0.5	27.4	42
PSMA5939B	39	9.6	45	900	0.25	0.5	29.7	38
PSMA5940B	43	8.7	53	950	0.25	0.5	32.7	35
PSMA5941B	47	8.0	67	1000	0.25	0.5	35.8	32
PSMA5942B	51	7.3	70	1100	0.25	0.5	38.8	29
PSMA5943B	56	6.7	86	1300	0.25	0.5	42.6	27
PSMA5944B	62	6.0	100	1500	0.25	0.5	47.1	24
PSMA5945B	68	5.5	120	1700	0.25	0.5	51.7	22

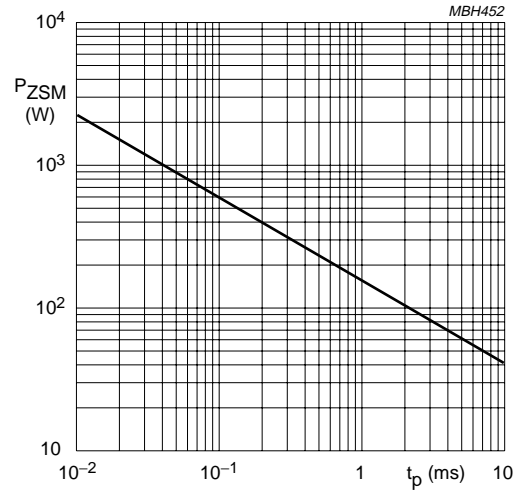
**Note**

1. Tolerance and Voltage Designation: Tolerance designation - The type number listed indicates a tolerance of ±5%.



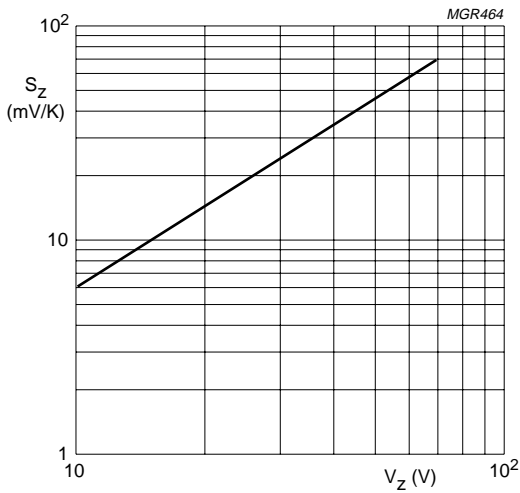
Solid line: tie-point temperature.  
Dotted line: ambient temperature; device mounted on an Al<sub>2</sub>O<sub>3</sub> printed-circuit board as shown in Fig.5.

Fig.2 Maximum total power dissipation as a function of temperature.



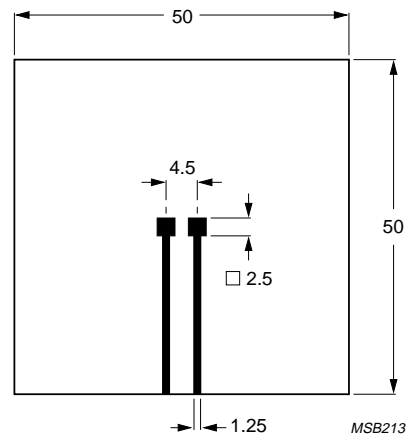
T<sub>j</sub> = 25 °C prior to surge.

Fig.3 Maximum non-repetitive peak reverse power dissipation as a function of pulse duration (square pulse).



V<sub>z</sub> at I<sub>ZT</sub>.

Fig.4 Temperature coefficient as a function of zener voltage; typical values.



Dimensions in mm.

Fig.5 Printed-circuit board for surface mounting.