

## Features

- $V_Z$  – Tolerance:  $\pm 5\%$
- For Surface Mount Applications
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range:  $-65^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Storage Temperature Range:  $-65^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Thermal Resistance :  $100^{\circ}\text{C/W}$  Junction to Ambient
- Thermal Resistance :  $75^{\circ}\text{C/W}$  Junction to Lead

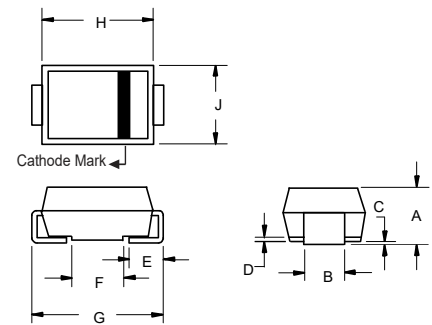
Parameter	Symbol	Rating	Conditions
Power Dissipation	$P_D$	1.0W	$T_A \leq 50^{\circ}\text{C}$
Zener Current	$I_Z$	$P_d/V_z$ mA	
Maximum Forward Voltage	$V_F$	1.2V	$I_F = 100\text{mA}$

Note:

1. Halogen free "Green" products are defined as those which contain  $<900\text{ppm}$  bromine,  $<900\text{ppm}$  chlorine ( $<1500\text{ppm}$  total Br + Cl) and  $<1000\text{ppm}$  antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

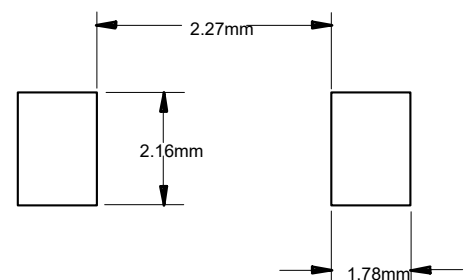
# 1.0 Watt Surface Mount Silicon Zener Diodes 5.1V to 100V

## SMA (DO-214AC) LEAD FRAME



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	0.002	0.008	0.051	0.203	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
H	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

### SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC Part Number	Zener Voltage	Test Current	Maximum Dynamic Impedance	Knee Current	Knee Impedance	Maximum Reverse Current	Reverse Voltage	Maximum DC Zener Current	Marking Code
	$V_Z$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_{ZK}$	$Z_{Zk}$	$I_R$	$V_R$	$I_{ZM}@T_A=50^\circ\text{C}$	
	V	mA	$\Omega$	mA	$\Omega$	$\mu\text{A}$	V	mA	
SMAJ4733A	5.1	49	7	1	550	10	1	177	733A
SMAJ4734A	5.6	45	5	1	600	10	2	161	734A
SMAJ4735A	6.2	41	2	1	700	10	3	146	735A
SMAJ4736A	6.8	37	3.5	1	700	10	4	133	736A
SMAJ4737A	7.5	34	4	0.5	700	10	5	121	737A
SMAJ4738A	8.2	31	4.5	0.5	700	10	6	110	738A
SMAJ4739A	9.1	28	5	0.5	700	10	7	100	739A
SMAJ4740A	10	25	7	0.25	700	10	7.6	91	740A
SMAJ4741A	11	23	8	0.25	700	5	8.4	83	741A
SMAJ4742A	12	21	9	0.25	700	5	9.1	76	742A
SMAJ4743A	13	19	10	0.25	700	5	9.9	69	743A
SMAJ4744A	15	17	14	0.25	700	5	11.4	61	744A
SMAJ4745A	16	15.5	16	0.25	700	5	12.2	57	745A
SMAJ4746A	18	14	20	0.25	750	5	13.7	50	746A
SMAJ4747A	20	12.5	22	0.25	750	5	15.2	45	747A
SMAJ4748A	22	11.5	23	0.25	750	5	16.7	41	748A
SMAJ4749A	24	10.5	25	0.25	750	5	18.2	38	749A
SMAJ4750A	27	9.5	35	0.25	750	5	20.6	34	750A
SMAJ4751A	30	8.5	40	0.25	1000	5	22.8	30	751A
SMAJ4752A	33	7.5	45	0.25	1000	5	25.1	27	752A
SMAJ4753A	36	7	50	0.25	1000	5	27.4	25	753A
SMAJ4754A	39	6.5	60	0.25	1000	5	29.7	23	754A
SMAJ4755A	43	6	70	0.25	1500	5	32.7	22	755A
SMAJ4756A	47	5.5	80	0.25	1500	5	35.8	19	756A
SMAJ4757A	51	5	95	0.25	1500	5	38.8	18	757A
SMAJ4758A	56	4.5	110	0.25	2000	5	42.6	16	758A
SMAJ4759A	62	4	125	0.25	2000	5	47.1	14	759A
SMAJ4760A	68	3.7	150	0.25	2000	5	51.7	13	760A
SMAJ4761A	75	3.3	175	0.25	2000	5	56	12	761A
SMAJ4762A	82	3	200	0.25	3000	5	62.2	11	762A
SMAJ4763A	91	2.8	250	0.25	3000	5	69.2	10	763A
SMAJ4764A	100	2.5	350	0.25	3000	5	76	9	764A

## Curve Characteristics

Fig. 1 - Power Derating Curve

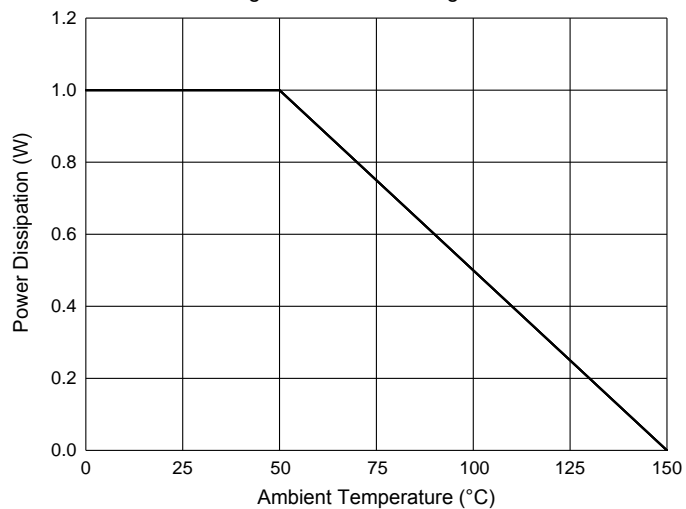
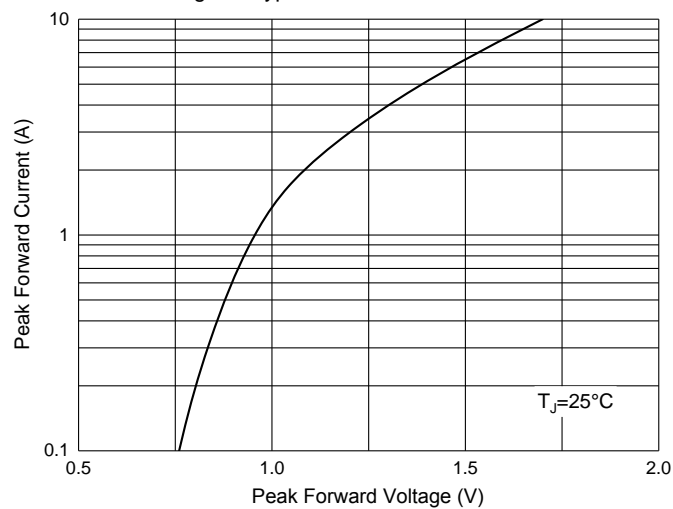


Fig. 2 - Typical Forward Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:7.5Kpcs/Reel

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