Micro Commercial Components
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SMAJ4740AHE3 THRU SMAJ4764AHE3

1 Watt Zener Diode 10 to 100 Volts

Features

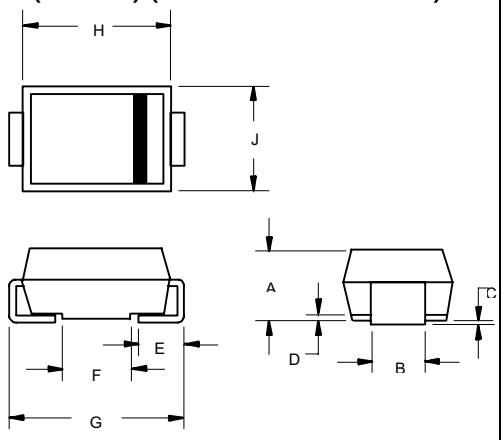
- Halogen free
- Low Zener Impedance
- Low Regulation Factor
- V_Z – tolerance: ±5%
- For Surface Mount Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- AEC-Q101 Qualified

Maximum Ratings@25℃Unless Otherwise Specified

Parameters	Test Conditions	Symbol	Value	Unit
Power Dissipation	Tamb≤50℃	Pd	1	W
Z-Current		Iz	Pd/Vz	mA
Operating Junction Temperature		Tj	-65~+150	℃
Storage Temperature		Tstg	-65~+150	℃
Thermal Resistence	FR-4 Board, MCC's Suggested Solder Pad	RΘja RΘjL	100 75	K/W
Max. Forward Voltage Drop	IF=100mA	Vf	1.2	V

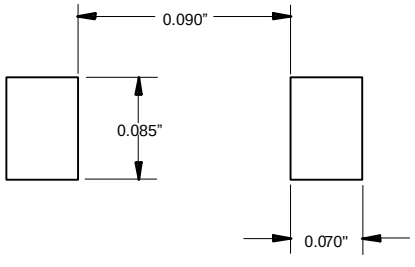
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AC (SMA)(LEAD FRAME)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
F	.065	.091	1.65	2.32	
G	.189	.220	4.80	5.59	
H	.157	.181	4.00	4.60	
J	.090	.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER	ZENER VOLTAGE V_Z	TEST CURRENT I_{ZT}	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} @I_{ZT}	MAXIMUM REVERSE CURRENT I_R	REVERSE VOLTAGE V_R	KNEE IMPEDANCE Z_{ZK}	KNEE CURRENT I_{ZK}	DEVICE MARKING
	VOLTS	mA	OHMS	μA	VOLTS	OHMS	mA	
SMAJ4740AHE3	10	25	7	10	7.6	700	0.25	740A
SMAJ4741AHE3	11	23	8	5	8.4	700	0.25	741A
SMAJ4742AHE3	12	21	9	5	9.1	700	0.25	742A
SMAJ4743AHE3	13	19	10	5	9.9	700	0.25	743A
SMAJ4744AHE3	15	17	14	5	11.4	700	0.25	744A
SMAJ4745AHE3	16	15.5	16	5	12.2	700	0.25	745A
SMAJ4746AHE3	18	14	20	5	13.7	750	0.25	746A
SMAJ4747AHE3	20	12.5	22	5	15.2	750	0.25	747A
SMAJ4748AHE3	22	11.5	23	5	16.7	750	0.25	748A
SMAJ4749AHE3	24	10.5	25	5	18.2	750	0.25	749A
SMAJ4750AHE3	27	9.5	35	5	20.6	750	0.25	750A
SMAJ4751AHE3	30	8.5	40	5	22.8	1000	0.25	751A
SMAJ4752AHE3	33	7.5	45	5	25.1	1000	0.25	752A
SMAJ4753AHE3	36	7	50	5	27.4	1000	0.25	753A
SMAJ4754AHE3	39	6.5	60	5	29.7	1000	0.25	754A
SMAJ4755AHE3	43	6	70	5	32.7	1500	0.25	755A
SMAJ4756AHE3	47	5.5	80	5	35.8	1500	0.25	756A
SMAJ4757AHE3	51	5	95	5	38.8	1500	0.25	757A
SMAJ4758AHE3	56	4.5	110	5	42.6	2000	0.25	758A
SMAJ4759AHE3	62	4	125	5	47.1	2000	0.25	759A
SMAJ4760AHE3	68	3.7	150	5	51.7	2000	0.25	760A
SMAJ4761AHE3	75	3.3	175	5	56	2000	0.25	761A
SMAJ4762AHE3	82	3	200	5	62.2	3000	0.25	762A
SMAJ4763AHE3	91	2.8	250	5	69.2	3000	0.25	763A
SMAJ4764AHE3	100	2.5	350	5	76	3000	0.25	764A

Characteristics (T_j=25℃ unless otherwise specified)

Symbol	Parameter
Vz	Reverse zener voltage @ I_{ZT}
I_{ZT}	Reverse current
Z_{ZT}	Maximum zener impedance @ I_{ZT}
I_{ZK}	Reverse current
Z_{ZK}	Maximum zener impedance @ I_{ZK}
I_R	Reverse leakage current @ V_R
V_R	Breakdown voltage
I_F	Forward current
V_F	Forward voltage @ I_F

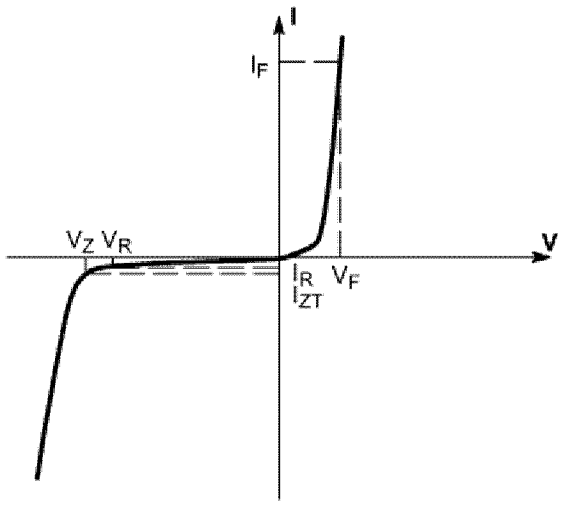


Figure 1. Zener voltage regulator

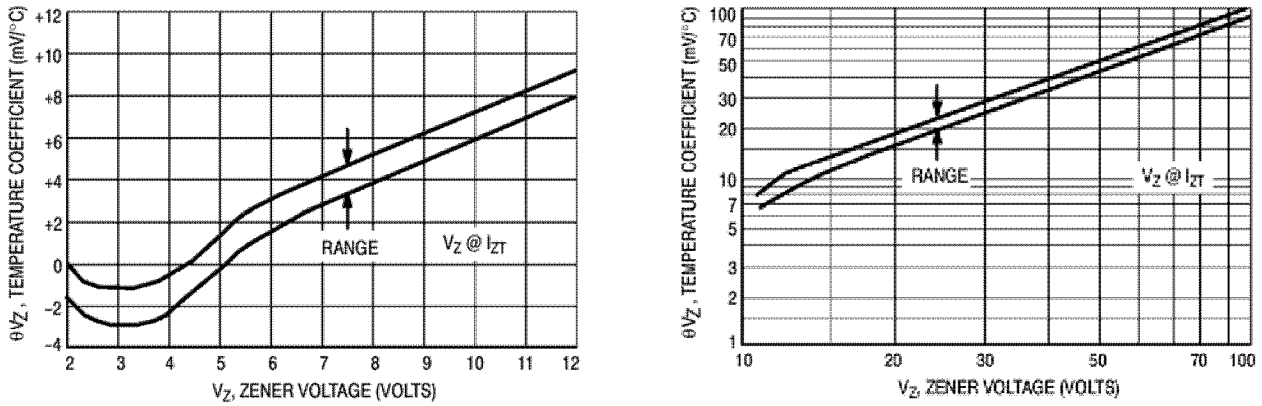


Figure 2. Temperature coefficients

(-55℃ to +150℃ temperature range; 90% of the units are in the ranges indicated)

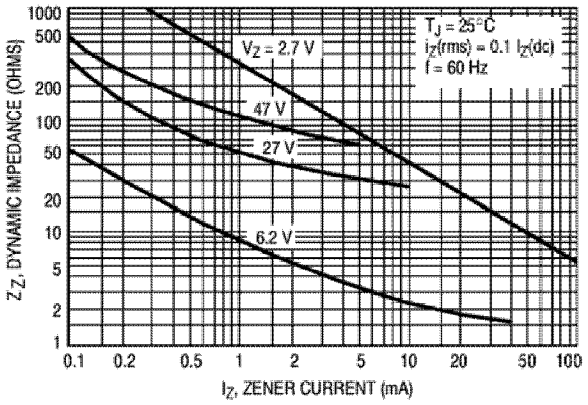


Figure 3. Effect of zener current on zener impedance

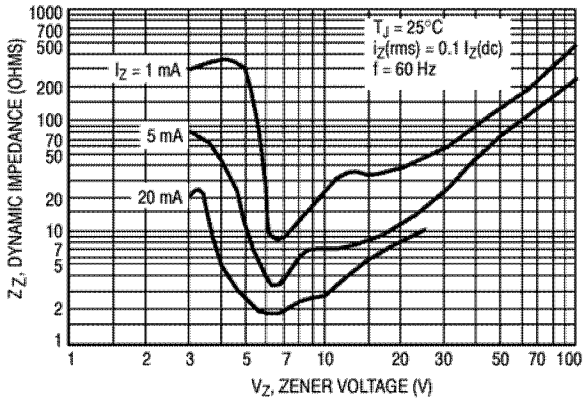


Figure 4. Effect of zener voltage on zener impedance

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Ordering Information :

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

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