



ZIBO MICRO COMMERCIAL COMPONENTS CORP.



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SMAJ4740AHE3 THRU SMAJ4764AHE3

Features

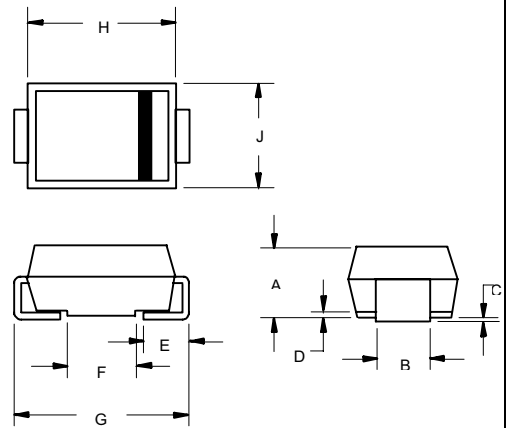
- Halogen free
- Low Zener Impedance
- Low Regulation Factor
- V_z – tolerance: $\pm 5\%$
- For Surface Mount Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
-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

**1 Watt
Zener Diode
10 to 100 Volts**

Maximum Ratings@25°C Unless Otherwise Specified

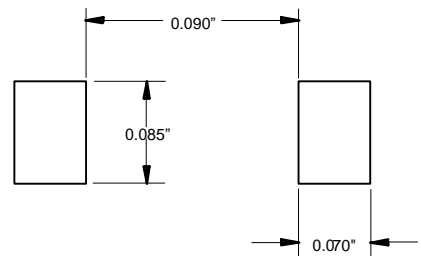
Parameters	Test Conditions	Symbol	Value	Unit
Power Dissipation	$T_{amb} \leq 50^\circ\text{C}$	P_d	1	W
Z-Current		I_z	P_d/V_z	mA
Operating Junction Temperature		T_j	-65~+150	$^\circ\text{C}$
Storage Temperature		T_{stg}	-65~+150	$^\circ\text{C}$
Thermal Resistance	FR-4 Board, MCC's	$R_{\theta ja}$	100	K/W
	Suggested Solder Pad	$R_{\theta jL}$	75	
Max. Forward Voltage Drop	$I_F=100\text{mA}$	V_f	1.2	V

DO-214AC (SMA)(LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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



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

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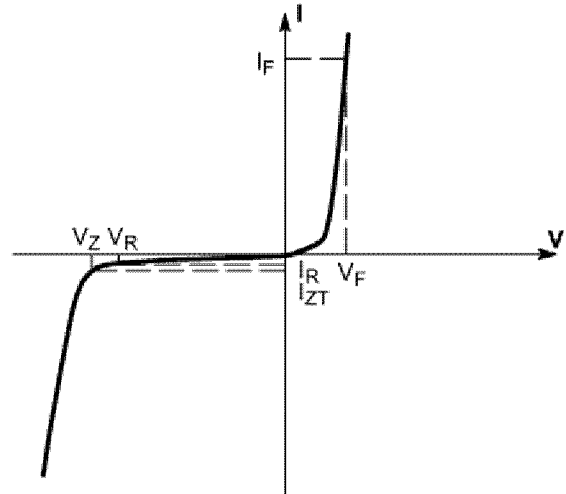
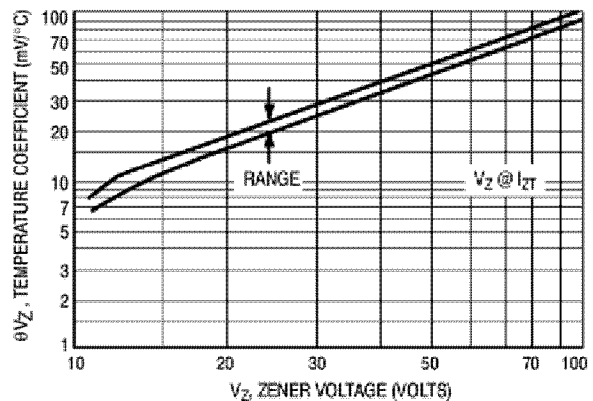
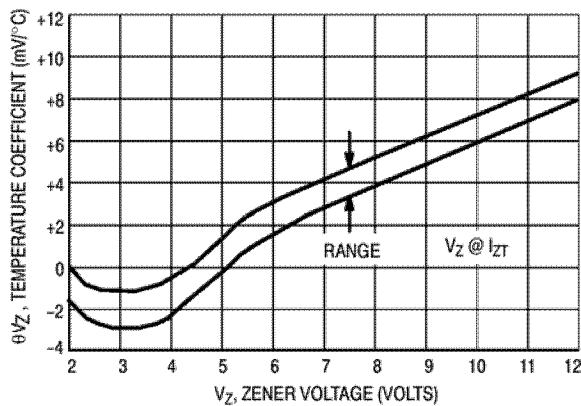
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ELECTRICAL CHARACTERISTICS @25°C

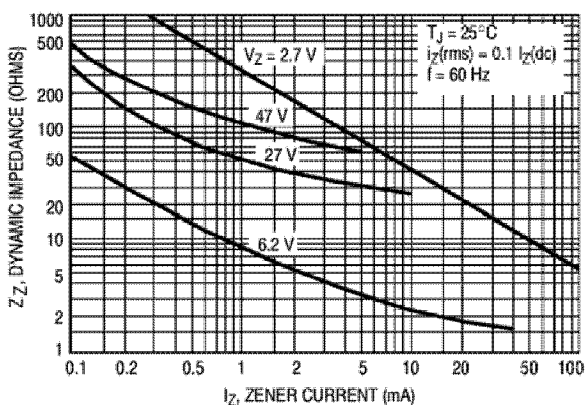
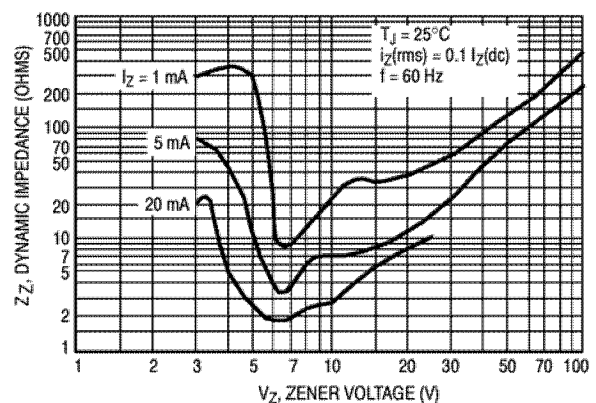
MCC PART NUMBER	ZENER VOLTAGE V_z	TEST CURRENT I_{zT}	MAXIMUM DYNAMIC IMPEDANCE $Z_{zT} @ I_{zT}$	MAXIMUM REVERSE CURRENT I_R	REVERSE VOLTAGE V_R	KNEE IMPEDANCE Z_{zk}	KNEE CURRENT I_{zk}	DEVICE MARKING
	VOLTS	mA	OHMS	μA	VOLTS	OHMS	mA	
SMAJ4740AHE3	10	25	7	10	7.6	700	0.25	740A
SMAJ4741AHE3	11	23	8	5	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 ($T_j=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter
V_Z	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°C to +150°C 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

*****LIFE SUPPORT*****

ZBMCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of ZiBo Micro Commercial Components Corp.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. ZiBo Micro Commercial Components Corp. is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. ZBMCC strongly encourages customers to purchase ZBMCC parts either directly from ZBMCC or from Authorized ZBMCC Distributors who are listed by country on our web page cited below. Products customers buy either from ZBMCC directly or from Authorized ZBMCC Distributors are genuine parts, have full traceability, meet ZBMCC's quality standards for handling and storage. ZBMCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. ZBMCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.