

1W, 3.3V - 56V Surface Mount Zener Diode

FEATURES

- Wide Zener voltage range selection: 3.3V to 56V
- V_Z Tolerance Selection of ± 5%
- · Hermetically sealed glass
- RoHS Compliant

APPLICATIONS

- Low voltage stabilizers or voltage references
- Adapters
- On-board DC/DC converter

MECHANICAL DATA

• Case: MELF

• Terminal: Matte tin plated leads, solderable per J-STD-002

Polarity: Indicated by cathode bandWeight: 129.90mg (approximately)

KEY PARAMETERS				
PARAMETER	VALUE	UNIT		
Vz	3.3 - 56	V		
Test current I _{ZT}	4.5 - 76	mA		
P _D	1	W		
T _{J MAX}	175	°C		
Package	MELF			
Configuration	Single die			







ABSOLUTE MAXIMUM RATINGS (T _A = 25°C unless otherwise noted)				
PARAMETER	SYMBOL	VALUE	UNIT	
Power dissipation	P_{D}	1	W	
Junction temperature range	T_J	-65 to +175	င့	
Storage temperature range	T _{STG}	-65 to +200	°C	

THERMAL PERFORMANCE				
PARAMETER	SYMBOL	TYP	UNIT	
Junction-to-ambient thermal resistance	R _{eJA}	170	°C/W	



	ZENER	TEST	REGULAR		TEST	LEAP	(AGE
	VOLTAGE	CURRENT	IMPE	DANCE	CURRENT	CURI	RENT
PART NUMBER	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT} Z _{ZK} @ I _{ZK}		I _{ZK}	$I_R @ V_R$	
	V	mA	Ω	Ω	mA	μΑ	V
	Nom		Max	Max		Max	
ZM4728A	3.3	76	10	400	1.0	100	1.0
ZM4729A	3.6	69	10	400	1.0	100	1.0
ZM4730A	3.9	64	9	400	1.0	50	1.0
ZM4731A	4.3	58	9	400	1.0	10	1.0
ZM4732A	4.7	53	8	500	1.0	10	1.0
ZM4733A	5.1	49	7	550	1.0	10	1.0
ZM4734A	5.6	45	5	600	1.0	10	2.
ZM4735A	6.2	41	2	700	1.0	10	3.
ZM4736A	6.8	37	3.5	700	1.0	10	4.
ZM4737A	7.5	34	4.0	700	0.5	10	5.
ZM4738A	8.2	31	4.5	700	0.5	10	6.
ZM4739A	9.1	28	5.0	700	0.5	10	7.
ZM4740A	10	25	7.0	700	0.25	10	7.
ZM4741A	11	23	8.0	700	0.25	5.0	8.
ZM4742A	12	21	9.0	700	0.25	5.0	9.
ZM4743A	13	19	10	700	0.25	5.0	9.
ZM4744A	15	17	14	700	0.25	5.0	11
ZM4745A	16	15.5	16	700	0.25	5.0	12
ZM4746A	18	14.0	20	700	0.25	5.0	13
ZM4747A	20	12.5	22	750	0.25	5.0	15
ZM4748A	22	11.5	23	750	0.25	5.0	16
ZM4749A	24	10.5	25	750	0.25	5.0	18
ZM4750A	27	9.5	35	750	0.25	5.0	20
ZM4751A	30	8.5	40	1000	0.25	5.0	22
ZM4752A	33	7.5	45	1000	0.25	5.0	25
ZM4753A	36	7.0	50	1000	0.25	5.0	27
ZM4754A	39	6.5	60	1000	0.25	5.0	29
ZM4755A	43	6.0	70	1500	0.25	5.0	32
ZM4756A	47	5.5	80	1500	0.25	5.0	35
ZM4757A	51	5.0	95	1500	0.25	5.0	38
ZM4758A	56	4.5	110	2000	0.25	5.0	42.

Notes:

- 1. The device numbers listed have a standard tolerance on the nomial Zener voltage of ±5%.
- 2. For detailed information on price, availability and delivery of nominal Zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Taiwan Semiconductor representative.
- 3. The Zener impedance is derived from the 60-cycle AC voltage, which results when an AC current having an rms value equal to 10% of the DC Zener current(I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

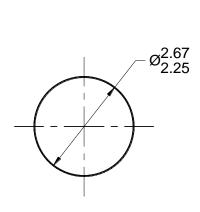
ORDERING INFORMATION			
ORDERING CODE ⁽¹⁾⁽²⁾	PACKAGE	PACKING	
ZM47xA L0	MELF	5,000 / 13" Tape & Reel	
ZM47xA L0G	MELF	5,000 / 13" Tape & Reel	

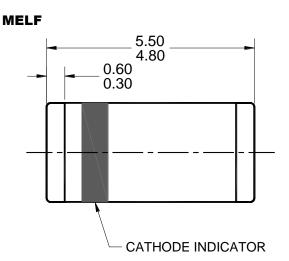
Notes:

- 1. "x" defines voltage from 3.3V (ZM4728A) to 56V (ZM4758A)
- 2. Above ordering codes L0/L0G refer to physically identical parts without any differences



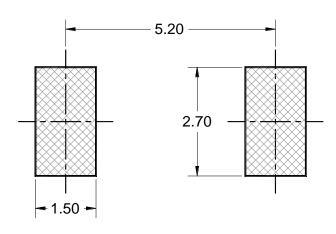
PACKAGE OUTLINE DIMENSIONS





NOTES: UNLESS OTHERWISE SPECIFIED

- 1. ALL DIMENSIONS ARE IN MILLIMETERS.
- 2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- 3. PACKAGE OUTLINE REFERENCE: JEDEC DO-213, VARIATION AB, ISSUE D.
- 4. DWG NO. REF: HQ2SD07-MELF-060 REV A.



SUGGESTED PAD LAYOUT



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