

NOTES:

1. DIMENSIONING & TOLERANCES PER ASME. Y14.5M-2009.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MEETS JEDEC OUTLINE MO-153 VARIATION EDT.
4. DIMENSION 'D' DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.15 PER SIDE.
5. DIMENSION 'E1' DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.25 PER SIDE.
6. "N" REFERS TO NUMBER OF LEADS.
7. NUMBER OF LEADS SHOWN ARE FOR REFERENCE ONLY.
8. DIMENSION 'b' DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSIONS SHALL BE 0.08mm TOTAL IN EXCESS OF THE 'b' DIMENSION AT MAXIMUM MATERIAL CONDITION. DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OF THE FOOT. MINIMUM SPACE BETWEEN PROTRUSION AND ADJACENT LEAD, 0.08mm FOR 0.50mm PITCH.
9. THE LEAD TIPS MUST LIE WITHIN A SPECIFIED ZONE. THIS TOLERANCE ZONE IS DEFINED BY TWO PARALLEL PLANES. ONE PLANE IS THE SEATING PLANE, DATUM [-C-]; THE OTHER PLANE IS AT THE SPECIFIED DISTANCE FROM [-C-] IN THE DIRECTION INDICATED.
10. CROSS SECTION B-B TO BE DETERMINED AT 0.10 TO 0.25MM FROM THE LEAD TIP.
11. A1 IS DEFINED AS THE VERTICAL CLEARANCE FROM THE SEATING PLANE TO THE LOWEST POINT ON THE PACKAGE BODY.
12. DATUMS A AND B TO BE DETERMINED AT DATUM PLANE H.
13. DIMENSIONS 'D' AND 'E1' TO BE DETERMINED AT DATUM PLANE H.
14. MARKING SHOWN IS FOR PACKAGE ORIENTATION REFERENCE ONLY.
15. DIMENSIONS "D1" AND "E2" ARE THERMALLY ENHANCED VARIATIONS AND DO NOT INCLUDE MOLD FLASH.
16. MATERIAL MUST BE COMPLIANT WITH MAXIM SPECIFICATION 10-0131 FOR SUBSTANCE CONTENT, MUST BE EU ROHS COMPLIANT WITHOUT EXEMPTION AND PB-FREE.
17. ALL DIMENSIONS APPLY TO PbFREE (+) PKG. CODE ONLY.
18. PKG CODE: U48EM+3.

SYMBOL	COMMON DIMENSIONS		
	MILLIMETERS		
	MIN.	NOM.	MAX.
A	0.90	--	1.10
A1	0.05	--	0.15
A2	0.85	0.90	0.95
b	0.17	--	0.27
b1	0.17	0.20	0.23
c	0.09	--	0.20
c1	0.09	0.127	0.16
D	12.40	12.50	12.60
E1	6.00	6.10	6.20
e	0.50 BSC		
E	8.10 BSC		
L	0.50	0.60	0.75
R	0.09	--	--
R1	0.09	--	--
S	0.20	--	--
N	48		
D1	7.22	7.32	7.42
E2	3.30	3.40	3.50
α	0°	--	8°

-DRAWING NOT TO SCALE-



TITLE:
PACKAGE OUTLINE, 48L TSSOP,
6.1mm BODY, EXPOSED PAD

APPROVAL
SCOTT SCHROEDER
08/29/14

DOCUMENT CONTROL NO.
21-0767

REV. A 2/2