



DIMENSIONS IN MM

SYMBOL	VARIATIONS												NOTES
	ALL DIMENSIONS IN MILLIMETERS												
	AA			BA			CA						
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	
A	—	—	2.80	—	—	2.00	—	—	1.90				
A1	0.15	—	0.35	0.45	—	0.65	0.45	—	0.65				
A2	2.15	2.30	2.45	1.15	1.25	1.35	1.15	1.25	1.35				
b	0.35	—	0.50	0.30	—	0.45	0.17	—	0.27				5, 8
b1	0.35	0.40	0.45	0.30	0.35	0.40	0.17	0.20	0.23				8
c	0.10	—	0.21	0.10	—	0.21	0.10	—	0.21				8
c1	0.10	0.15	0.18	0.10	0.15	0.18	0.10	0.15	0.18				8
D	28.00	28.30	28.60	23.40	23.70	24.00	23.40	23.70	24.00				3
E	15.70	16.00	16.30	15.70	16.00	16.30	15.70	16.00	16.30				
E1	13.10	13.30	13.50	13.10	13.30	13.50	13.10	13.30	13.50				4
e	1.27 BASIC			0.80 BASIC			0.50 BASIC						
L	0.60	0.80	1.00	0.60	0.80	1.00	0.60	0.80	1.00				
n	44			56			90						6
R	0.09	—	—	0.09	—	—	0.09	—	—				
θ	0°	4°	8°	0°	4°	8°	0°	4°	8°				
aaa	—	0.20	—	—	0.20	—	—	0.08	—				
bbb	—	—	0.10	—	—	0.10	—	—	0.08				
NOTE	1, 2			1, 2			1, 2						
REF.	11-421A			11-421A			11-571						
ISSUE	A			A			B						

NOTES

- 1 ALL DIMENSIONS ARE IN MILLIMETERS.
- 2 DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994
- ③ DIMENSION "D" DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.15 mm PER END.
- ④ DIMENSION "E1" DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION, INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.25 mm PER SIDE.
- ⑤ DIMENSION b DOES NOT INCLUDE DAMBER PROTRUSION/INTRUSION. ALLOWABLE DAMBER PROTRUSION SHALL NOT EXCEED 0.15 mm PER SIDE. DAMBAR INTRUSION SHALL NOT REDUCE DIMENSION b BY MORE THAN 0.07 mm AT LEAST MATERIAL CONDITION.
- ⑥ "n" IS THE NUMBER OF TERMINAL POSITIONS.
- ⑦ A VISUAL INDEX FEATURE MUST BE LOCATED WITHIN THE CROSSHATCHED AREA.
- ⑧ THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 AND 0.25 mm FROM THE LEAD TIPS.
- ⑨ A1 IS DEFINED AS THE DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT OF THE PACKAGE.
- ⑩ DATUM'S A AND B TO BE DETERMINED AT DATUM PLANE H.
- ⑪ DIMENTIONS 'D' AND 'E1' TO BE DETERMINED AT DATUM PLANE H.

JEDEC SOLID STATE OUTLINES	TITLE: PLASTIC SMALL OUTLINE PACKAGE(SOP)- 13.30mm BODY WIDTH.	ISSUE B	DATE 02/01	M□-180	PAGE 3 OF 3
----------------------------------	---	------------	---------------	--------	----------------