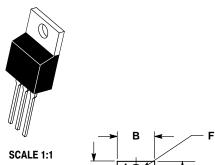
## **MECHANICAL CASE OUTLINE**





TO-220 CASE 221A-09 **ISSUE AH** 

**DATE 28 AUG 2014** 

## NOTES:

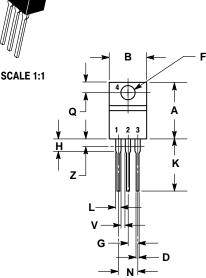
- NOTES:

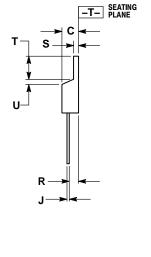
  1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.

  2. CONTROLLING DIMENSION: INCH.

  3. DIMENSION Z DEFINES A ZONE WHERE ALL BODY AND LEAD IRREGULARITIES ARE ALLOWED.

	INCHES MILLIMETERS			IETERS
DIM	MIN	MAX	MIN	MAX
Α	0.570	0.620	14.48	15.75
В	0.380	0.415	9.66	10.53
C	0.160	0.190	4.07	4.83
D	0.025	0.038	0.64	0.96
F	0.142	0.161	3.61	4.09
G	0.095	0.105	2.42	2.66
Н	0.110	0.161	2.80	4.10
ſ	0.014	0.024	0.36	0.61
K	0.500	0.562	12.70	14.27
٦	0.045	0.060	1.15	1.52
N	0.190	0.210	4.83	5.33
Q	0.100	0.120	2.54	3.04
R	0.080	0.110	2.04	2.79
S	0.045	0.055	1.15	1.39
Т	0.235	0.255	5.97	6.47
U	0.000	0.050	0.00	1.27
٧	0.045		1.15	
Z		0.080		2.04





STYLE 1:		STYLE 2:		STYLE 3:		STYLE 4:	
PIN 1.	BASE	PIN 1.	BASE	PIN 1.	CATHODE	PIN 1.	MAIN TERMINAL 1
2.	COLLECTOR	2.	EMITTER	2.	ANODE	2.	MAIN TERMINAL 2
3.	EMITTER	3.	COLLECTOR	3.	GATE	3.	GATE
4.	COLLECTOR	4.	EMITTER	4.	ANODE	4.	MAIN TERMINAL 2
STYLE 5:		STYLE 6:		STYLE 7:		STYLE 8:	
PIN 1.	GATE	PIN 1.	ANODE	PIN 1.	CATHODE	PIN 1.	CATHODE
2.	DRAIN	2.	CATHODE	2.	ANODE	2.	ANODE
3.	SOURCE	3.	ANODE	3.	CATHODE	3.	EXTERNAL TRIP/DELAY
4.	DRAIN	4.	CATHODE	4.	ANODE	4.	ANODE
STYLE 9:		STYLE 10:		STYLE 11	:	STYLE 12	:
PIN 1.	GATE	PIN 1.	GATE	PIN 1.	DRAIN	PIN 1.	MAIN TERMINAL 1
2.	COLLECTOR	2.	SOURCE	2.	SOURCE	2.	MAIN TERMINAL 2
3.	EMITTER	3.	DRAIN	3.	GATE	3.	GATE
4.	COLLECTOR	4.	SOURCE	4.	SOURCE	4.	NOT CONNECTED

DOCUMENT NUMBER:	98ASB42148B	
STATUS:	ON SEMICONDUCTOR STANDARD	
NEW STANDARD:		
DESCRIPTION:	TO-220	

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DOCUMENT	NUMBER:
98ASB42148	В

PAGE 2 OF 2

ISSUE	REVISION	DATE
AB	CHANGED MINIMUM DIMENSION FOR S FROM 0.045 (1.15) TO 0.020 (0.508). REQ. BY W. LOW.	04 MAY 2006
AC	INTERNAL REVISION IN DDCM	30 MAY 2006
AD	REVERSED CHANGES FROM REVISION AB. RETURNED DIMENSION S TO DUAL GAUGE VALUES. REQ. BY M. SCHAGER.	17 JUL 2006
AE	CHANGED MAXIMUM DIMENSION F FROM 0.147 INCH (3.73MM) TO 0.16 1INCH (4.09MM) AND MINIMUM DIMENSION FOR J FROM 0.018 INCH (0.46MM) TO 0.014 INCH (0.36MM). REQ. BY M. SCHAGER.	13 APR 2007
AF	ADDED STYLE 12. REQ. BY A. ANGUS.	26 NOV 2007
AG	CHANGED DIMENSIONS D AND H MAX LIMITS TO 0.036 (0.91) AND 0.161 (4.10) RESPECTIVELY. REQ. BY J. RAMIREZ.	16 SEP 2011
АН	MODIFIED MAXIMUM VALUES OF DIMENSIONS B TO 0.415 (10.53), C TO 0.190 (4.83), D TO 0.038 (0.96), & J TO 0.024 (0.61) TO MATCH SUB-CONTRACTORS SPECS. REQ. BY J. MORRIS.	28 AUG 2014

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