BU208
BU208A

HIGH VOLTAGE
NPN SILICON
POWER TRANSISTOR

TO-3 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BU208, BU208A types are high voltage NPN silicon power transistors, manufactured by the multiepitaxial mesa process, designed for fast switching horizontal deflection circuits in color televisions.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C)	**SYMBOL**		**UNITS**
Collector-Emitter Voltage	V_{CES}	1500	V
Collector-Emitter Voltage	V_{CEO}	700	V
Emitter-Base Voltage	V_{EBO}	10	V
Continuous Collector Current	I_C	8.0	A
Peak Collector Current	I_{CM}	15	A
Power Dissipation	P_D	150	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175	°C
Thermal Resistance	Θ_{JC}	1.0	°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_{CES}	V_{CE}=1500V			2.0	mA
I_{EBO}	V_{EB}=5.0V			100	µA
BV_{CEO}	I_C=100mA	700			V
BV_{EBO}	I_E=10mA	10			V
$V_{CE(SAT)}$	I_C=4.5A, I_B=2.0A (BU208)			5.0	V
$V_{CE(SAT)}$	I_C=4.5A, I_B=2.0A (BU208A)			1.0	V
$V_{BE(SAT)}$	I_C=4.5A, I_B=2.0A			1.3	V
f_T	V_{CE}=5.0V, I_C=100mA, f=5.0MHz		7.0		MHz
t_s	V_{CC}=140V, I_C=4.5A, h_{FE}=2.5		7.0		µs
t_f	L_C=0.9mH, L_B=3.0µH		0.55		µs

R0 (5-October 2012)

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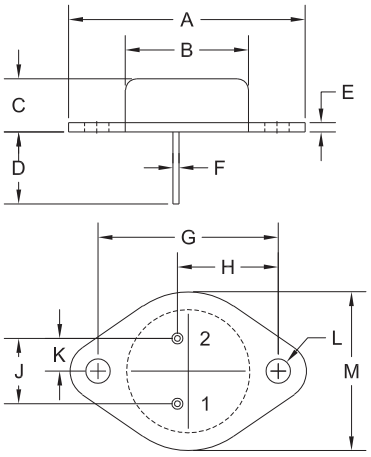
TO-3 CASE - MECHANICAL OUTLINE



R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	1.516	1.573	38.50	39.96
B (DIA)	0.748	0.875	19.00	22.23
C	0.250	0.450	6.35	11.43
D	0.433	0.516	11.00	13.10
E	0.054	0.065	1.38	1.65
F	0.035	0.045	0.90	1.15
G	1.177	1.197	29.90	30.40
H	0.650	0.681	16.50	17.30
J	0.420	0.440	10.67	11.18
K	0.205	0.225	5.21	5.72
L (DIA)	0.151	0.172	3.84	4.36
M	0.984	1.050	25.00	26.67

TO-3 (REV: R2)

LEAD CODE:
1) Base
2) Emitter
Case) Collector

MARKING:
FULL PART NUMBER

R0 (5-October 2012)