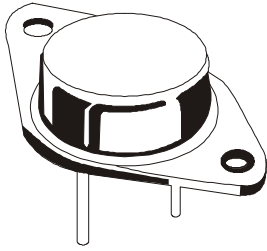


NPN POWER TRANSISTORS



**BU207
BU208**

**TO 3
Metal Can Package**

HORIZONTAL DEFLECTION CIRCUITS IN COLOUR TV RECEIVER APPLICATIONS

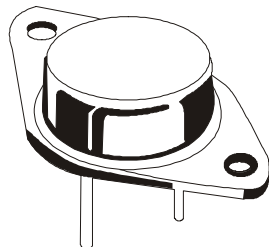
ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	207	208	UNITS
Collector Emitter Voltage ($V_{BE}=0$)	V_{CES}	<1300	<1500	V
Collector Emitter voltage (Open Base)	V_{CEO}	<600	<700	V
Collector Base Voltage	V_{CBO}	600	300	V
Emitter Base Voltage	V_{EBO}	<5		V
Collector Current	I_C	<5		A
Collector Current (Peak) (1)	I_{CM}	<7.5		A
Base Current (Peak) (1)	I_{BM}	<4		A
Total Power Dissipation upto $T_c=95^\circ\text{C}$	P_{tot}	<1.25		W
Derate Above 95°C		<0.625		W/ $^\circ\text{C}$
Junction Temperature	T_j	<200		$^\circ\text{C}$
Storage Temperature	T_{stg}	-65 To +200		$^\circ\text{C}$
THERMAL RESISTANCE				
Junction to Case	$R_{th(j-c)}$	1.6		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	207	208	UNITS
Collector Cutoff Current	I_{CES}	$V_{BE}=0, V_{CE}=1300\text{V}$	<1.0		mA
	I_{CES}	$V_{BE}=0, V_{CE}=1500\text{V}$		<1.0	mA
Breakdown Voltages					
	$V_{CEO(sus)}^*$	$I_C=100\text{mA}, I_B=0$	>600	>700	V
	V_{CES}	$I_C=1\text{mA}, V_{BE}=0$	>1300	>1500	V
	V_{EBO}	$I_E=10\text{mA}, I_C=0$	>5		V
Saturation Voltages					
	$V_{CE(Sat)}^*$	$I_C=4.5\text{A}, I_B=2\text{A}$	<5		V
	$V_{BE(Sat)}^*$	$I_C=4.5\text{A}, I_B=2\text{A}$	<1.5		V
DC Current Gain	h_{FE}^*	$I_C=4.5\text{A}, V_{CE}=5\text{V}$	>2.25		
Output Capacitance	C_o	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$	125 (Typ)		pF

NPN POWER TRANSISTORS



BU207
BU208

TO 3
Metal Can Package

DESCRIPTION	SYMBOL	TEST CONDITION	207	208	UNITS
Transition Frequency	f_T	$I_C=0.1A, V_{CE}=5V$ $f=1MHz$	4.0 (Typ)		MHz
SWITCHING TIME					
Fall Time	t_f	$I_C=4.5A, I_B=1.8A, L_B=10\mu H$ $f=1kHz$	0.6 (Typ)		μs

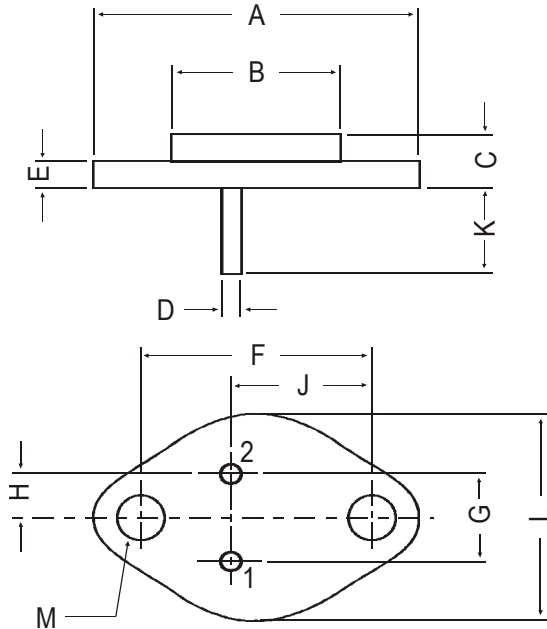
(1) Pulse test : Pulse Width =5ms, Duty Cycle \leq 10%

*Pulse Test: Pulse Width =300ms, Duty Cycle \leq 2%

**BU207
BU208**

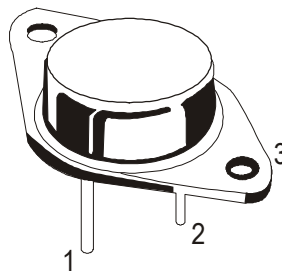
**TO 3
Metal Can Package**

TO-3 Metal Can Package



DIM	MIN.	MAX.
A	—	39.37
B	—	22.22
C	6.35	8.50
D	0.96	1.09
E	—	1.77
F	29.90	30.40
G	10.69	11.18
H	5.20	5.72
J	16.64	17.15
K	11.15	12.25
L	—	26.67
M	3.84	4.19

All dimensions in mm.



PIN CONFIGURATION
 1. BASE
 2. EMITTER
 3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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