

#### 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 <sub>BE</sub> = 0)	V <sub>CES</sub>	<1300	<1500	V
Collector Emitter voltage (Open Base)	V <sub>CEO</sub>	<600	<700	V
Collector Base Voltage	V <sub>CBO</sub>	600	300	V
Emitter Base Voltage	V <sub>EBO</sub>	</td <td colspan="2">&lt;5</td>	<5	
Collector Current	Ι <sub>C</sub>	</td <td colspan="2">&lt;5</td>	<5	
Collector Current (Peak) (1)	I <sub>CM</sub>	<7	<7.5	
Base Current (Peak) (1)	I <sub>BM</sub>	<4	<4	
Total Power Dissipation upto Tc=95°C	P <sub>tot</sub>	<1.	<1.25	
Derate Above 95°C		<0.6	<0.625	
Junction Temperature	T <sub>j</sub>	<20	<200	
Storage Temperature	T <sub>stg</sub>	-65 To	-65 To +200	
THERMAL RESISTANCE				
Junction to Case	R <sub>th(j-c)</sub>		1.6	

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

DESCRIPTION	SYMBOL	SYMBOL TEST CONDITION		208	UNITS
Collector Cutoff Current	I <sub>CES</sub>	I <sub>CES</sub> V <sub>BE</sub> =0, V <sub>CE</sub> =1300V			mA
	I <sub>CES</sub>	V <sub>BE</sub> =0, V <sub>CE</sub> =1500V		<1.0	mA
Breakdown Voltages					
Dieakuowii vollayes	V <sub>CEO(sus)</sub> *	I <sub>C</sub> =100mA,I <sub>B</sub> =0	>600	>700	V
	V <sub>CES</sub>	I <sub>C</sub> =1mA,V <sub>BE</sub> =0	>1300	>1500	V
	V <sub>EBO</sub>	I <sub>E</sub> =10mA, I <sub>C</sub> =0	>5		V
Saturation Voltages					
	V <sub>CE(Sat)</sub> *	I <sub>C</sub> =4.5A,I <sub>B</sub> =2A	<5		V
	V <sub>BE(Sat)</sub> *	I <sub>C</sub> =4.5A,I <sub>B</sub> =2A	<1.5		V
DC Current Gain	h <sub>FE</sub> *	$I_{C}$ =4.5A, $V_{CE}$ =5V	>2.25		
Output Capacitance	C <sub>o</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=0.1MHz	125 (Тур)		pF

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DESCRIPTION	SYMBOL	TEST CONDITION	207	208	UNITS
Transition Frequency	f⊤	I <sub>C</sub> =0.1A, V <sub>CE</sub> =5V f=1MHz	4.0 (Typ)		MHz
SWITCHING TIME					
Fall Time	t <sub>f</sub>	I <sub>C</sub> =4.5A, I <sub>B</sub> =1.8A, L <sub>B</sub> =10μH f=1kHz	0.6 (Тур)		μs

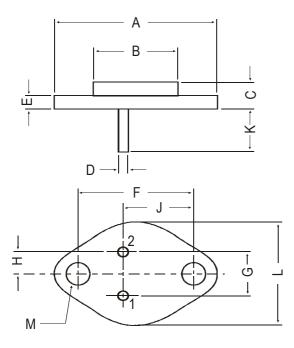
(1) Pulse test : Pulse Width =5ms, Duty Cycle  $\leq$  10%

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

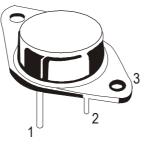
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### TO 3 Metal Can Package

## TO-3 Metal Can Package



	DIM	MIN.	MAX.
	Α		39.37
	В	_	22.22
	С	6.35	8.50
	D	0.96	1.09
dimensions in mm.	Е		1.77
	F	29.90	30.40
	G	10.69	11.18
	Н	5.20	5.72
	J	16.64	17.15
	Κ	11.15	12.25
	L	_	26.67
Allo	М	3.84	4.19



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
ТО-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

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