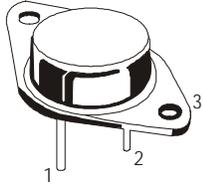


**NPN SILICON PLANAR POWER TRANSISTORS**

**BU208  
BU208A**

**TO-3  
Metal Can Package**



**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Emitter Voltage	$V_{CEO}$	700	V
Collector Emitter Voltage	$V_{CEX}$	1500	V
Emitter Base Voltage	$V_{EBO}$	5.0	V
Collector Current Continuous	$I_C$	5.0	A
Peak	$I_{CM}$	7.5	A
Base Current Continuous	$I_B$	2.5	A
Collector Power Dissipation @ $T_c=25^\circ\text{C}$	$P_C$	55	W
Junction Temperature	$T_j$	115	$^\circ\text{C}$
Operating and Storage Junction Temperature Range	$T_{stg}$	- 65 to +115	$^\circ\text{C}$

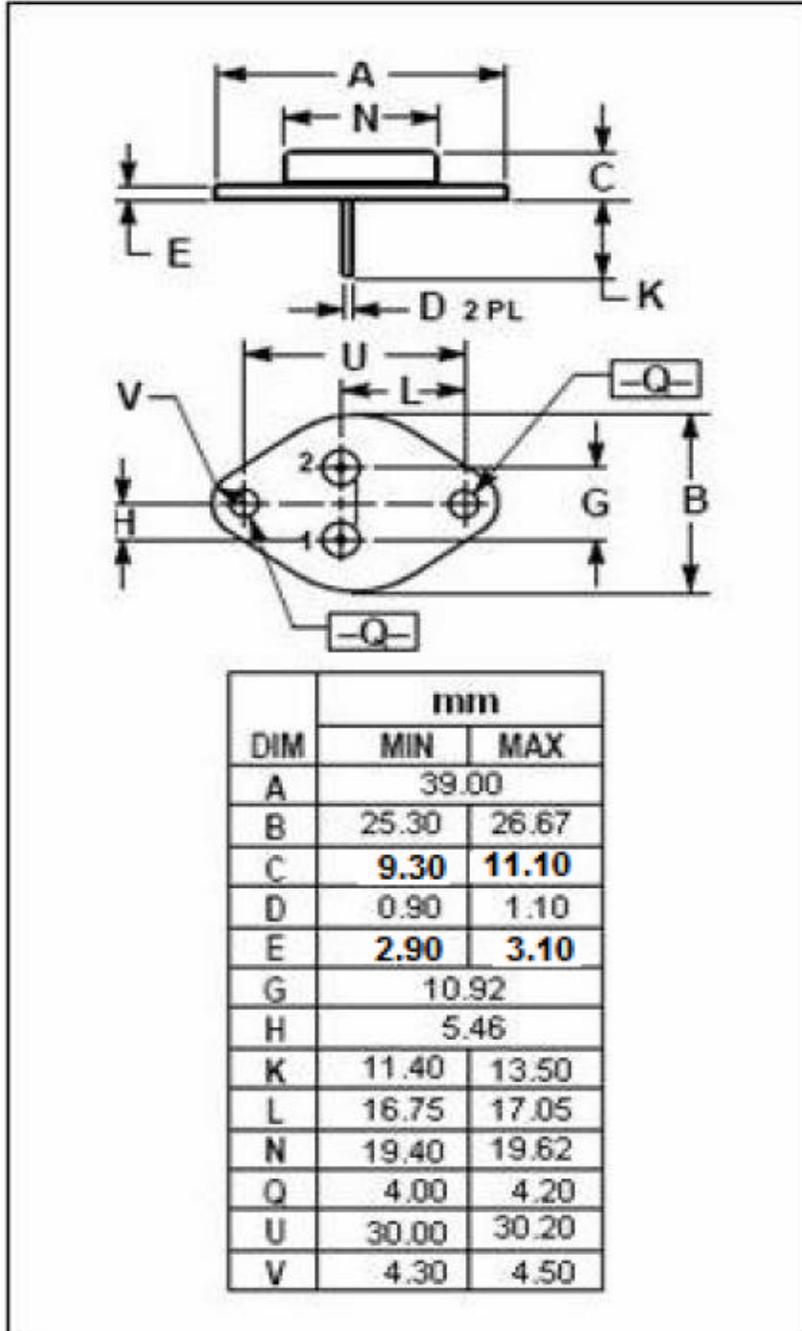
**THERMAL CHARACTERISTICS**

Thermal Resistance Junction to Case	$R_{th(j-c)}$	1.64	$^\circ\text{C/W}$
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**ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	Typ	MAX	UNITS
Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}, I_B=0$	700			V
Collector Cut off Current	$I_{CES}$	$V_{CE}=1500\text{V}, V_{BE}=0$			1.0	mA
Emitter Cut off Current	$I_{EBO}$	$V_{EB}=5.0\text{V}, I_C=0$			10	mA
DC Current Gain	$h_{FE}$	$I_C=4.5\text{A}, V_{CE}=5\text{V}$	2.25			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.5\text{A}, I_B=2\text{A}$			5	V
BU208 BU208A					1	
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.5\text{A}, I_B=2\text{A}$			1.5	V
Current Gain Bandwidth Product	$f_T$	$I_C=0.1\text{A}, V_{CE}=5\text{V}, f=1\text{MHz}$		4.0		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		125		pF
Fall Time	$t_f$	$I_C=4.5\text{A}, I_{B1}=1.8\text{A}, L_B=10\mu\text{H}$		1		$\mu\text{s}$

### TO-3 Metal Can Package





Continental Device India Limited

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## Notes

### 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 is 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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