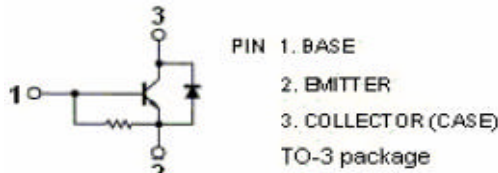
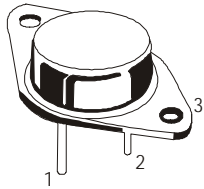


NPN SILICON PLANAR POWER TRANSISTORS

BU208D



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}	10	V
Collector Current Continuous	I_C	8	A
Peak	I_{CM}	15	A
Base Current Continuous	I_B	2.5	A
Collector Power Dissipation @ $T_c=25^\circ\text{C}$	P_C	150	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_{stg}	- 65 to +175	$^\circ\text{C}$

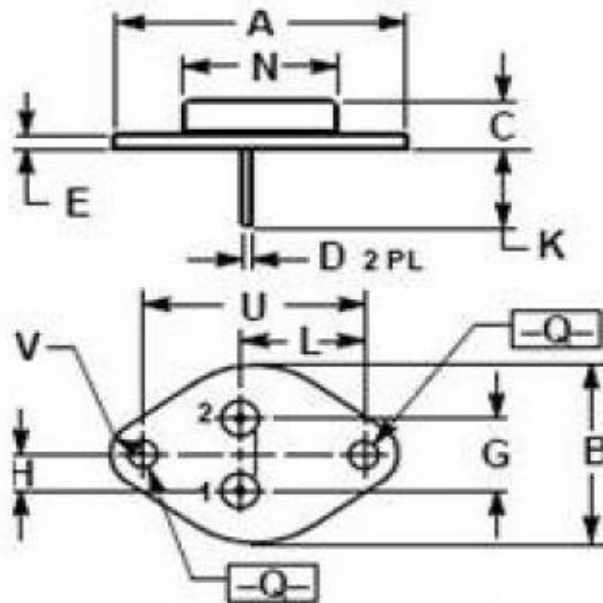
THERMAL CHARACTERISTICS

Thermal Resistance Junction to Case	$R_{th(j-c)}$	1.0	$^\circ\text{C/W}$
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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
		$V_{CE}=1500\text{V}$, $V_{BE}=0$, $T_C=125^\circ\text{C}$			2.0	
Emitter Cut off Current	I_{EBO}	$V_{EB}=5.0\text{V}$, $I_C=0$			300	mA
DC Current Gain	h_{FE}	$I_C=1\text{A}$, $V_{CE}=5\text{V}$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.5\text{A}$, $I_B=2\text{A}$			1.0	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.5\text{A}$, $I_B=2\text{A}$			1.3	V
Current Gain Bandwidth Product	f_T	$I_C=0.1\text{A}$, $V_{CE}=5\text{V}$, $f=5\text{MHz}$		7		MHz
Collector Emitter Diode Forward Voltage	V_{ECF}	$I_F=4\text{A}$			2	V
Storage Time	t_s	$I_C=4.5\text{A}$, $I_B=1.8\text{A}$, $L_B=10\mu\text{H}$, $V_{CC}=140\text{V}$, $L_C=0.9\text{mH}$		7		μs
Fall Time	t_f			0.55		μs

TO-3 Metal Can Package



DIM	mm	
	MIN	MAX
A	39.00	
B	25.30	26.67
C	9.30	11.10
D	0.90	1.10
E	2.90	3.10
G	10.92	
H	5.46	
K	11.40	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50



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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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