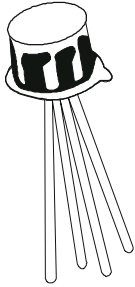


**NPN SILICON PLANAR TRANSISTOR**

**2N3478  
TO-72**



**VHF/UHF Applications**

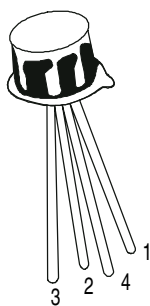
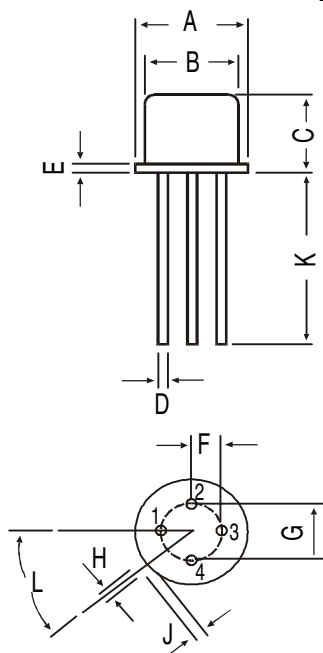
**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	30	V
Collector -Emitter Voltage	VCEO	15	V
Emitter Base Voltage	VEBO	2.0	V
Collector Current	IC	50	mA
Power Dissipation @ Ta=25 deg C	Ptot	200	mW
Operating & Storage Junction Temperature Range	Tj, Tstg	-65 to +200	deg C

**ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	ICBO	VCB=15V, IE=0	-	-	20	nA
Collector -Base Voltage	VCBO	IC=1uA, IE=0	30	-	-	V
Collector -Emitter Voltage	VCEO	IC=1uA, IB=0	15	-	-	V
Emitter Base Voltage	VEBO	IE=1uA, IC=0	2.0	-	-	V
DC Current Gain	hFE	IC=2mA, VCE=8V	25	-	150	
<b>DYNAMIC CHARACTERISTICS</b>						
Forward Current Transfer Ratio	hfe	IC=2mA, VCE=8V, f=100MHz	7.5	-	16	
Out-Put Capacitance	Ccb	VCB=10V, IE=0, f=1MHz	-	-	1.0	pF

## TO-72 Metal Can Package



### PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR
4. CASE

All dimensions in mm.

DIM	MIN.	MAX.
A	5.24	5.84
B	4.52	4.95
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	1.14	1.39
G	2.28	2.97
H	0.91	1.17
J	0.71	1.22
K	12.70	—
L	12 DEG	48 DEG

## Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-72	1 K/Polybag	325 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	32 kgs

## 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 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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