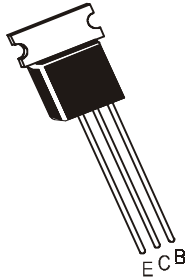


**NPN SILICONHIGH VOLTAGE TRANSISTOR**

**CIL2230, A**



**TO-237  
Plastic Package**

**General Purpose High Voltage Amplifier and Colour TV Class B Sound Output Applications.**

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

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	$V_{CBO}$	200	V
Collector -Emitter Voltage	$V_{CEO}$	160	V
	<b>CIL 2230</b>	180	V
	<b>A</b>	5	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current Continuous	$I_C$	100	mA
Base Current	$I_B$	50	mA
Power Dissipation	$P_D$	800	mW
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	-55 to +150	°C

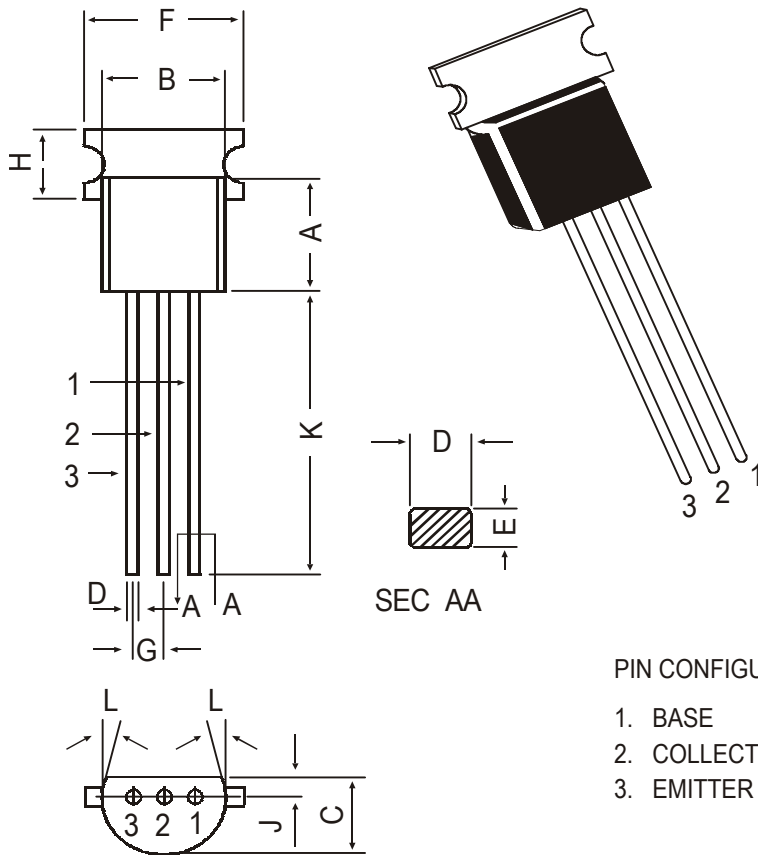
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Voltage	$BV_{CEO}$	$I_C=1mA, I_B=0$	160			V
	<b>CIL2230</b>		180			V
	<b>A</b>					
Collector Cut off Current	$I_{CBO}$	$V_{CB}=200V, I_E=0$			100	nA
Emitter Cut off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			100	nA
DC Current Gain	$h_{FE} (1)$	$I_C=10mA, V_{CE}=10V$	120		400	
	$h_{FE} (2)$	$I_C=50mA, V_{CE}=10V$	80			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.5	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=10V, I_C=1mA$	0.5	0.6	0.7	V

DYNAMIC CHARACTERISTICS	SYMBOL	TEST CONDITION	VALUE			UNIT
			MIN	TYP	MAX	
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=10mA,$	50			MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0,$ $f=1MHz$			7	pF

CLASSIFICATION	Y	GR
$h_{FE}$	120-240	200-400

TO-237 Plastic Package



All dimensions in mm.

DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	—	5.40
G	1.14	1.40
H	—	2.54
K	12.70	—
L	5 DEG	
J	1.14	1.53

PIN CONFIGURATION

1. BASE
2. COLLECTOR
3. EMITTER

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-237 Bulk	1K/polybag	240 gm/1K pcs	3" x 7.5" x 7.5"	5K	17" x 15" x 13.5"	80K	26.2 kgs
TO-237 T&A	2K/ammo box	725 gm/2K pcs	12.5" x 8" x 1.8"	2K	17" x 15" x 13.5"	32K	13.8 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 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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