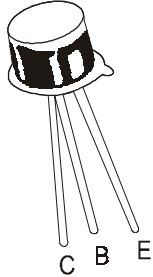


NPN SILICON PLANAR EPITAXIAL TRANSISTORS

CIL 351

CIL 352



TO-18

Metal Can Package

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

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Emitter Voltage	V_{CEO}	70	V
Collector Base Voltage	V_{CBO}	75	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current Continuous	I_C	200	mA
Total Power Dissipation @Ta=25°C	P_D	600	mW
Derate Above 25°C		3.43	mW/°C
Total Power Dissipation @ Tc=25°C	P_D	1	W
Derate Above 25°C		5.71	mW/°C
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200	°C
THERMAL RESISTANCE			
Junction to Ambient	$R_{th(j-a)}$	291.7	°C/W
Junction to Case	$R_{th(j-c)}$	175	°C/W

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

DESCRIPTION	SYMBOL	TEST CONDITION	VALUE			UNIT
			MIN	TYP	MAX	
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA, I_B=0$	70			V
Collector Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	75			V
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	6.0			V
Collector Cut off Current	I_{CBO}	$V_{CB}=20V, I_E=0$			25	nA
DC Current Gain	h_{FE}	$I_C=1mA, V_{CE}=10V$				
			CIL352	200		480
	CIL351	100		250		
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$ *	$I_C=10mA, I_B=0.5mA$			250	mV
		$I_C=100mA, I_B=5mA$			600	mV
Base Emitter On Voltage	$V_{BE(on)}$	$I_C=10mA, V_{CE}=5V$			1.0	V
		$I_C=500mA, I_B=50mA$				V
DYNAMIC CHARACTERISTICS						
Transition Frequency	f_T	$I_C=10mA, V_{CE}=5V$ $f=100MHz$		100		MHz

*Pulse Condition: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$

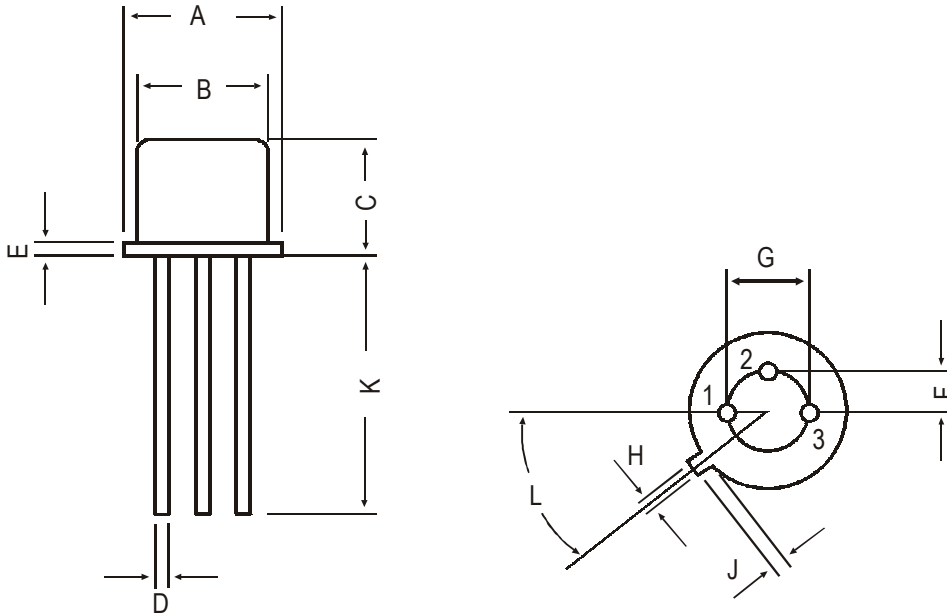
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TO-18

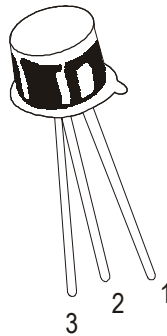
Metal Can Package

TO-18 Metal Can Package



All dimensions in mm.

DIM	MIN	MAX
A	5.24	5.84
B	4.52	4.97
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	—	1.27
G	—	2.97
H	0.91	1.17
J	0.71	1.21
K	12.70	—
L	45 DEG	



PIN CONFIGURATION

- 1. EMITTER
- 2. BASE
- 3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-18	1K/polybag	350 gm/1K pcs	3" x 7.5" x 7.5"	5K	17" x 15" x 13.5"	80K	34 kgs

Disclaimer

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