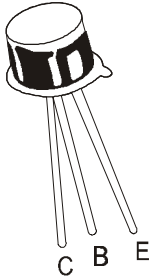


NPN SILICON PLANAR TRANSISTORS

CIL351/352



TO-18
Metal Can Package

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Emitter Voltage	V_{CEO}	70	V
Collector Base Voltage	V_{CBO}	75	V
Emitter Base Voltage	V_{EBO}	6.0	V
Collector Current Continuous	I_C	200	mA
Power Dissipation @ $T_a=25^\circ\text{C}$ Derate Above 25°C	P_D	300 1.72	mW mW/ $^\circ\text{C}$
Power Dissipation @ $T_c=25^\circ\text{C}$ Derate Above 25°C	P_D	750 4.29	mW mW/ $^\circ\text{C}$
Operating And Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

Junction to Ambient in free air	$R_{th(j-a)}$	583	$^\circ\text{C/W}$
Junction to Case	$R_{th(j-c)}$	233	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Voltage	V_{CEO}	$I_C=1\text{mA}, I_B=0$	70			V
Collector Base Voltage	V_{CBO}	$I_C=100\mu\text{A}, I_E=0$	75			V
Emitter Base Voltage	V_{EBO}	$I_E=100\mu\text{A}, I_C=0$	6.0			V
Collector Cut Off Current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			25	nA
DC Current Gain	h_{FE}	$I_C=1\text{mA}, V_{CE}=10\text{V}$ CIL351 CIL352	100 200		250 480	
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=10\text{mA}, I_B=0.5\text{mA}$ $I_C=100\text{mA}, I_B=5\text{mA}$			0.25 0.60	V V
Base Emitter on Voltage	$V_{BE(on)}$	$I_C=10\text{mA}, V_{CE}=5\text{V}$			1.0	V

DYNAMIC CHARACTERISTICS

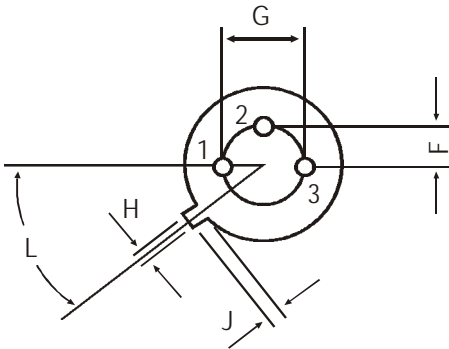
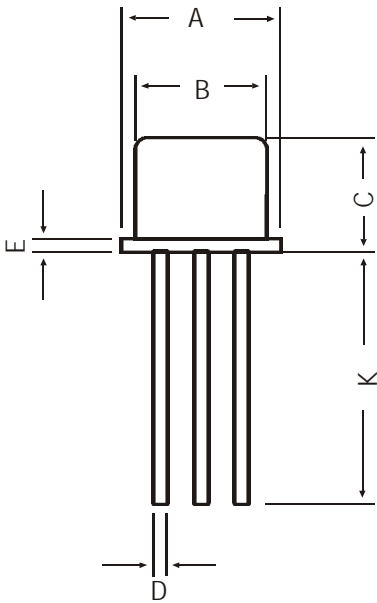
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Transition Frequency	f_T	$I_C=10\text{mA}, V_{CE}=5\text{V},$ $f=100\text{MHz}$		100		MHz

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

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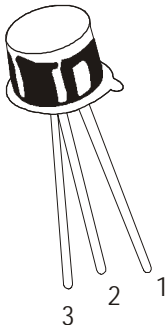
**TO-18
Metal Can Package**

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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