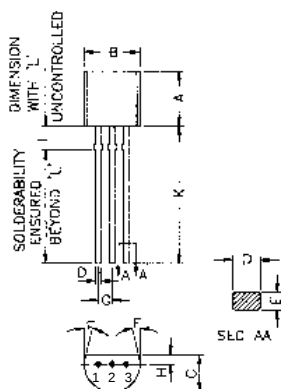


TO-92 Plastic Package

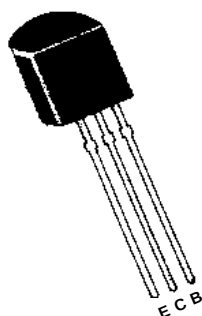
CP756
CP757

PNP SILICON PLANAR EPITAXIAL TRANSISTORS

Medium Power High Voltage Transistors
Complementary to CN 656 and CN 657.



1 = EMITTER
2 = BASE
3 = COLLECTOR



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 DEG	
G	1,14	1,40
H	1,14	1,53
K	12,70	—
L	1.982	2.082

ALL DIMENSIONS IN M.M.

ABSOLUTE MAXIMUM RATINGS

Rating	Symbol	CP 756	CP 757	Unit
Collector-Base Voltage	V_{CBO}	200	300	V
Collector-Emitter Voltage	V_{CEO}	200	300	V
Emitter-Base Voltage	V_{EBO}	-	5.0	V
Peak Collector Current	I_{CM}	-	1.0	A
Continuous Collector Current	I_C	-	0.5	A
Practical power dissipation*	P_{totp}	-	1.5	W
Power Dissipation : At $T_a=25^\circ\text{C}$	P_{tot}	-	0.75	W
Derate Above 25°C		-	5.7	mW/ $^\circ\text{C}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200		$^\circ\text{C}$

THERMAL RESISTANCE

Junction to Ambient 1	$R_{th(j-a)}^1$	-	<175	-	$^\circ\text{C/W}$
Junction to Ambient 2	$R_{th(j-a)}^{2+}$	-	<116	-	$^\circ\text{C/W}$
Junction to Case	$R_{th(j-c)}$	-	<70	-	$^\circ\text{C/W}$

*The power which can be dissipated assuming device mounted in typical manner on P.C.B with copper equal to 1 sq.inch minimum.

(2) Device mounted on P.C.B. with copper equal to 1 Sq.inch minimum.

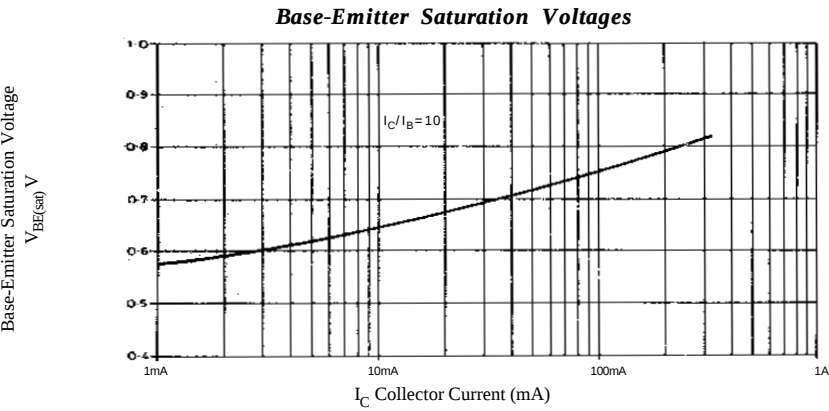
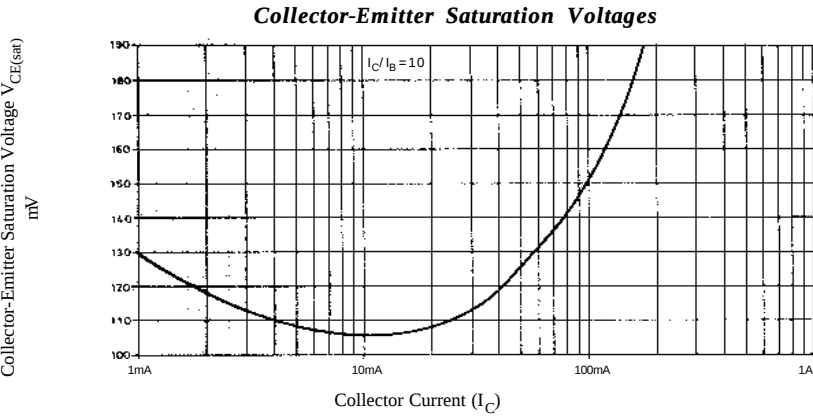
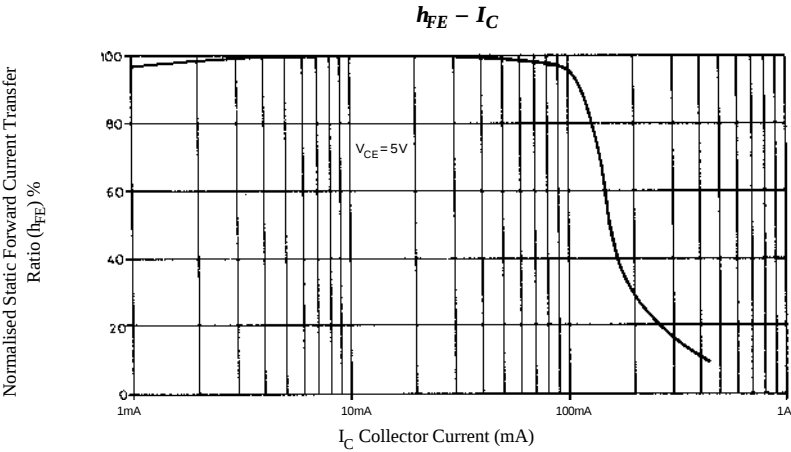
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$ unless otherwise specified)

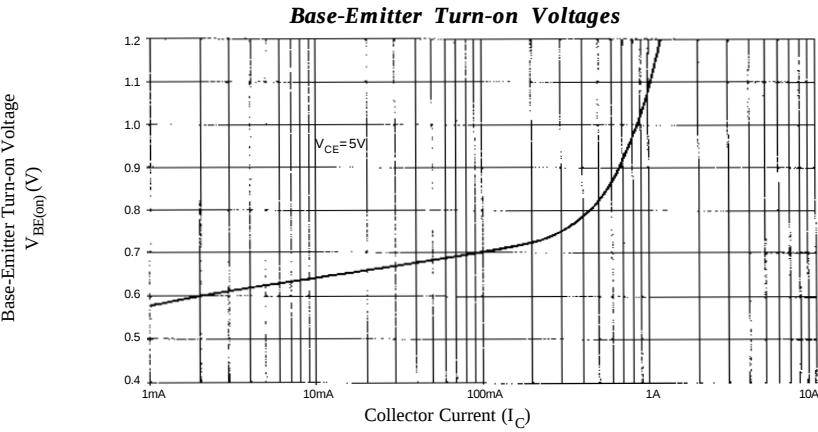
Characteristic	Symbol	CP 756	CP 757	Unit
Collector Base Voltage $I_C=100\mu\text{A}$, $I_E=0$	BV_{CBO}	>200	>300	V
Collector Emitter Voltage $I_C=10\text{mA}$, $I_B=0$	BV_{CEO}	>200	>300	V
Emitter Base Voltage $I_E=100\mu\text{A}$, $I_C=0$	BV_{EBO}	>5	>5	V
Collector Cutoff Current $V_{CB}=160\text{V}$, $I_E=0$	I_{CBO}	<100	-	nA
$V_{CB}=200\text{V}$, $I_E=0$		-	<100	nA
Emitter Cutoff Current $V_{EB}=3\text{V}$, $I_C=0$	I_{EBO}	<100	<100	nA
Collector-Emitter Saturation Voltage $I_C=100\text{mA}$, $I_B=10\text{mA}$	$V_{CE(sat)*}$	<0.5	<0.5	V
Base-Emitter Saturation Voltage $I_C=100\text{mA}$, $I_B=10\text{mA}$	$V_{BE(sat)*}$	<1.0	<1.0	V
Base Emitter on voltage $I_C=100\text{mA}$, $V_{CE}=5\text{V}$	$V_{BE(on)*}$	<1.0	<1.0	V
DC Current Gain $I_C=10\text{mA}$, $V_{CE}=5\text{V}$	h_{FE*}	>40	>40	-
$I_C=100\text{mA}$, $V_{CE}=5\text{V}^*$		>50	>50	-

SMALL SIGNAL CHARACTERISTICS

Current Gain-Bandwidth Product $I_C=10\text{mA}$, $V_{CE}=20\text{V}$, $f=20\text{MHz}$	f_T	>30	>30	MHz
Output Capacitance $V_{CB}=20\text{V}$, $I_E=0$, $f=1\text{MHz}$	C_{obo}	<20	<20	pF

*Measured under pulsed conditions : Pulse Width = $300\mu\text{s}$, Duty Cycle $\leq 2\%$.





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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