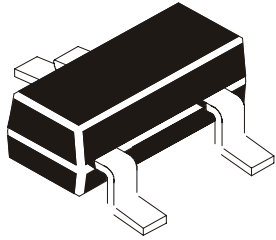


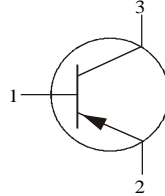
**PNP SILICON PLANAR SWITCHING TRANSISTOR**

**CPBT720  
SOT-23**



PIN CONFIGURATION (PNP)

- 1 = BASE
- 2 = EMITTER
- 3 = COLLECTOR



**MARKING: C20**

**ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	35	V
Collector -Emitter Voltage	VCEO	40	V
Emitter Base Voltage	VEBO	5.0	V
Peak Pulse Current **	ICM	4.0	A
Continuous Collector Current	IC	1.50	A
Base Current	IB	500	mA
Power Dissipation @ Tamb=25 deg C *	Ptot	350	mW
Operating And Storage Junction Temperature Range	Tj, Tstg	-55 to +150	deg C

\*Maximum Power Dissipation is Calculated Assuming That The Device is Mounted on A Ceramic Substrate Measuring 15x15x0.6mm

\*\* Measured Under Pulsed Conditions. Pulse Width =300us, Duty Cycle=2%

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector -Base Voltage	VCBO	IC=100uA, IE=0	40	-	-	V
Collector -Emitter Voltage	VCEO*	IC=10mA, IB=0	35	-	-	V
Emitter Base Voltage	VEBO	IE=100uA, IC=0	5.0	-	-	V
Collector Cut off Current	ICBO	VCB=35V, IE=0	-	-	100	nA
	ICES	VCE=35V, VEB=0	-	-	100	nA
Emitter Cut off Current	IEBO	VEB=4V, IC=0	-	-	100	nA
	Collector Emitter Saturation Voltage	VCE(Sat)*	IC=0.1A, IB=10mA	-	-	50
Base Emitter Saturation Voltage	VBE(Sat)*	IC=1A, IB=50mA	-	-	350	mV
		IC=1.5A, IB=100mA	-	-	500	mV
		IC=1.5A, IB=75mA	-	-	1.5	V
Base Emitter (on) Voltage	VBE(on)*	IC=1.5A, VCE=2V	-	-	1.0	V
DC Current Gain	hFE*	IC=10mA, VCE=2V	300	-	-	
		IC=0.1A, VCE=2V	300	-	-	
		IC=1A, VCE=2V	180	-	-	
		IC=1.5A, VCE=2V	60	-	-	
		IC=3A, VCE=2V	12	-	-	

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

**CPBT720**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
<b>Dynamic Characteristics</b>						
Transition Frequency	ft	VCE=10V, IC=50mA, f=100MHz	150	-	-	MHz
Output Capacitance	Cobo	VCB=10V, f=1MHz	-	-	25	pF

\*\* Measured Under Pulsed Conditions. Pulse Width =300us, Duty Cycle=2%



## Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12.0K	17" x 15" x 13.5"	192.0K	12 kgs
			9" x 9" x 9"	51.0K	19" x 19" x 19"	408.0K	28 kgs
	10K/reel	415 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	16 kgs

## Customer Notes

### Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

## 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 are 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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