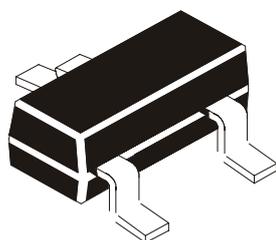


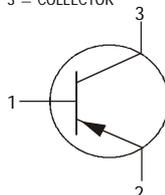
## PNP EPITAXIAL PLANAR SILICON TRANSISTOR

**CMBT857**  
**SOT23**



PIN CONFIGURATION (PNP)

1 = BASE  
2 = EMITTER  
3 = COLLECTOR



**MARKING: AS BELOW**

### ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	60	V
Collector -Emitter Voltage	VCEO	50	V
Emitter Base Voltage	VEBO	6.0	V
Collector Current	IC	200	mA
Collector Power Dissipation	PC	200	mW
Junction Temperature	Tj	125	deg C
Storage Temperature	Tstg	-55 to +125	deg C

### ELECTRICAL CHARACTERISTICS (Ta=25 deg C unless otherwise specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector -Emitter Voltage	VCEO	IC=100uA, IB=0	50	-	-	V
Collector Cut off Current	ICBO	VCB=60V, IE=0	-	-	100	nA
Emitter Cut off Current	IEBO	VEB=6V, IC=0	-	-	100	nA
DC Current Gain	hFE(1)	IC=1mA, VCE=6V	150	-	500	
	hFE(2)	IC=0.1mA, VCE=6V	90	-	-	
Collector Emitter Saturation Voltage	VCE(Sat)	IC=100mA, IB=10mA	-	-	0.30	V
Base Emitter Saturation Voltage	VBE(Sat)	IC=100mA, IB=10mA	-	-	1.0	V
<b>Dynamic Characteristics</b>						
Transition Frequency	ft	VCE=6V, IC=10mA,	-	200	-	MHz
Collector Output Capacitance	Cob	VCB=6V, IE=0	-	4.0	-	pF
		f=1MHz				
Noise Figure	NF	VCE=6V, IE=0.3mA	-	-	20	dB
		f=100Hz, Rg=10kohms				

### CLASSIFICATION

	E	F
hFE(1)	150-300	250-500
MARKING	PE	PF



## 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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