

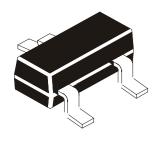




An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

PNP EPITAXIAL PLANAR SILICON TRANSISTOR

CMBA857 SOT23



PIN CONFIGURATION (PNP)

1 = BASE
2 = EMITTER
3 = COLLECTOR
3

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 50 **Collector - Emitter Voltage VCEO** IC=100uA, IB=0 -V **Collector Cut off Current ICBO** VCB=60V, IE=0 100 nΑ **IEBO Emitter Cut off Current** VEB=6V, IC=0 100 nΑ **DC Current Gain** IC=1mA,VCE=6V hFE(1) 150 500 hFE(2) IC=0.1mA,VCE=6V 90 **Collector Emitter Saturation Voltage** VCE(Sat) IC=100mA,IB=10mA 0.30 ٧ **Base Emitter Saturation Voltage** VBE(Sat) IC=100mA,IB=10mA 1.0 **Dynamic Characteristics 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 dB 20 f=100Hz, Rg=10kohms

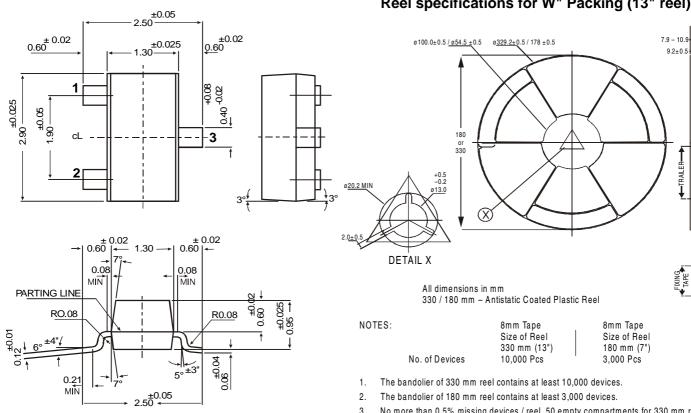
 CLASSIFICATION
 E
 F

 hFE(1)
 150-300
 250-500

 MARKING
 PA
 PB

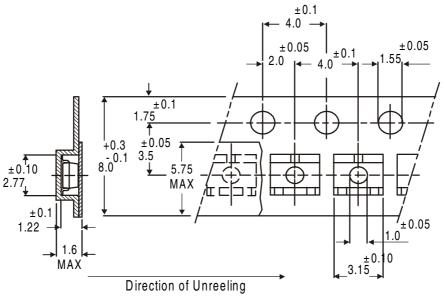
SOT-23 Formed SMD Package

SOT-23 Package Reel Information Reel specifications for W" Packing (13" reel)



- No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel.
 empty compartments for 180 mm reel.
- Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
- The carrier tape (leader) starts with at least 75 empty positions (equivalent to 330 mm). In order to fix the carrier tape a self adhesive tape of 20 to 50 mm is applied. At the end of the bandolier at least 40 empty positions (equivalent to 160 mm) are there.

Tape Specification for SOT-23 Surface Mount Device



All dimensions in mm

Packing Detail

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PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX					
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt			
S0T-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5" 9" x 9" x 9"		17" x 15" x 13.5" 19" x 19" x 19"	192.0K 408.0K	12 kgs 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			

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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