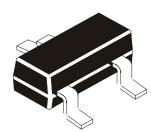
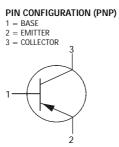
An ISO/TS16949 and ISO 9001 Certified Company



CMBT 9015 SOT-23

# PNP SILICON PLANAR TRANSISTOR





MARKING: AS BELOW

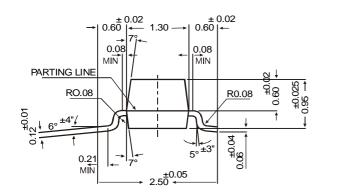
### **ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT	
Collector -Base Voltage	VCBO	30	V	
Collector -Emitter Voltage	VCEO	30	V	
Emitter Base Voltage	VEBO	5.0	V	
Collector Current	IC	100	mA	
Collector Dissipation	PC	250	mW	
Operating And Storage Junction	Tj, Tstg	-55 to +150	deg C	
Temperature Range			-	

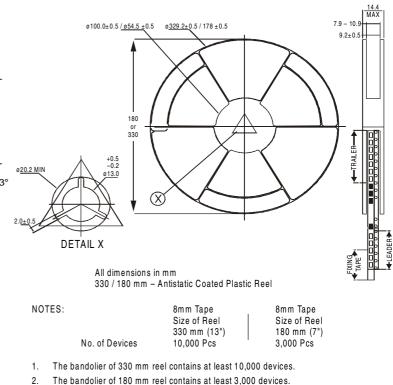
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)								
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT		
Collector -Base Voltage	VCBO IC=100uA, IE=0		30	-	-	V		
Collector -Emitter Voltage	VCEO IC=1mA, IB=0		30	-	-	V		
Emitter Base Voltage	VEBO IE=100uA, IC=0		5.0	-	-	V		
Collector Cut off Current	ICBO	BO VCB=30V, IE=0		-	15	nA		
Emitter Cut off Current	IEBO	VEB=5V, IC=0	-	-	500	nA		
DC Current Gain	hFE	IC=1mA, VCE=5V	150	-	1000			
Collector Emitter Saturation Voltage	VCE(Sat)	IC=100mA,IB=5mA	-	-	0.70	V		
Base Emitter Saturation Voltage	VBE(Sat)	IC=100mA,IB=5mA	-	-	1.2	V		
Dynamic Characteristics								
Transition Frequency	ft	VCE=5V,IC=10mA, f=100MHz	125	-	-	MHz		
Output Capacitance	Cob	VCB=10V,f=1MHz	-	-	3.5	pF		
CLASSIFICATION hFE	CMBT901 150-1000		C 200-600		D 400-1000			
MARKING	150-1000	15B	200-600 15C		400-1000 15D			

## SOT-23 Formed SMD Package

#### ±0.05 2.50 — ± 0.02 ±0.02 ±0.025 1.30— 1 0.0 9 +0.08 ±0.025 ±0.05 040 2.90 8 cl 3 1 2 3°<mark>7</mark>

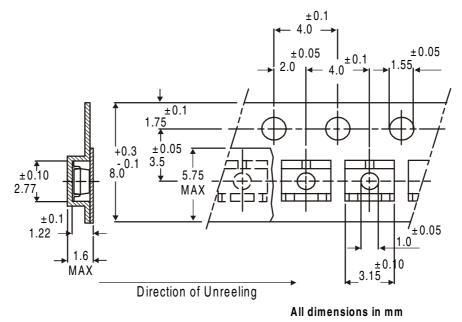


## SOT-23 Package Reel Information Reel specifications for W" Packing (13" reel)



- 3. No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel. 15 empty compartments for 180 mm reel.
- 4. 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**



# 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	5	3" x 7.5" x 7.5" 9" x 9" x 9"	12.0K 51.0K	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

## **Customer 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 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).

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Data Sheet