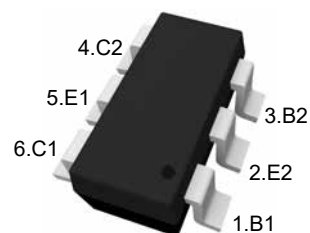


Features

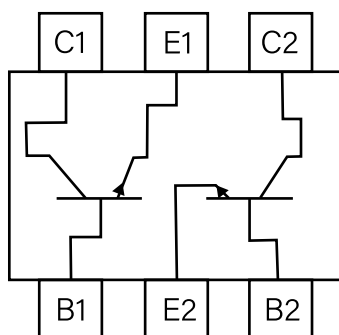
- For switching and amplifier applications

Double PNP Transistors

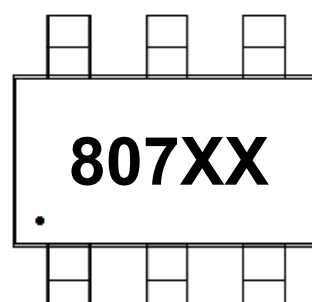
SOT-23-6



Equivalent Circuit



Marking Code



XX: Current Gain Group
e.g. BC807SG-25: 80725

Absolute Maximum Ratings

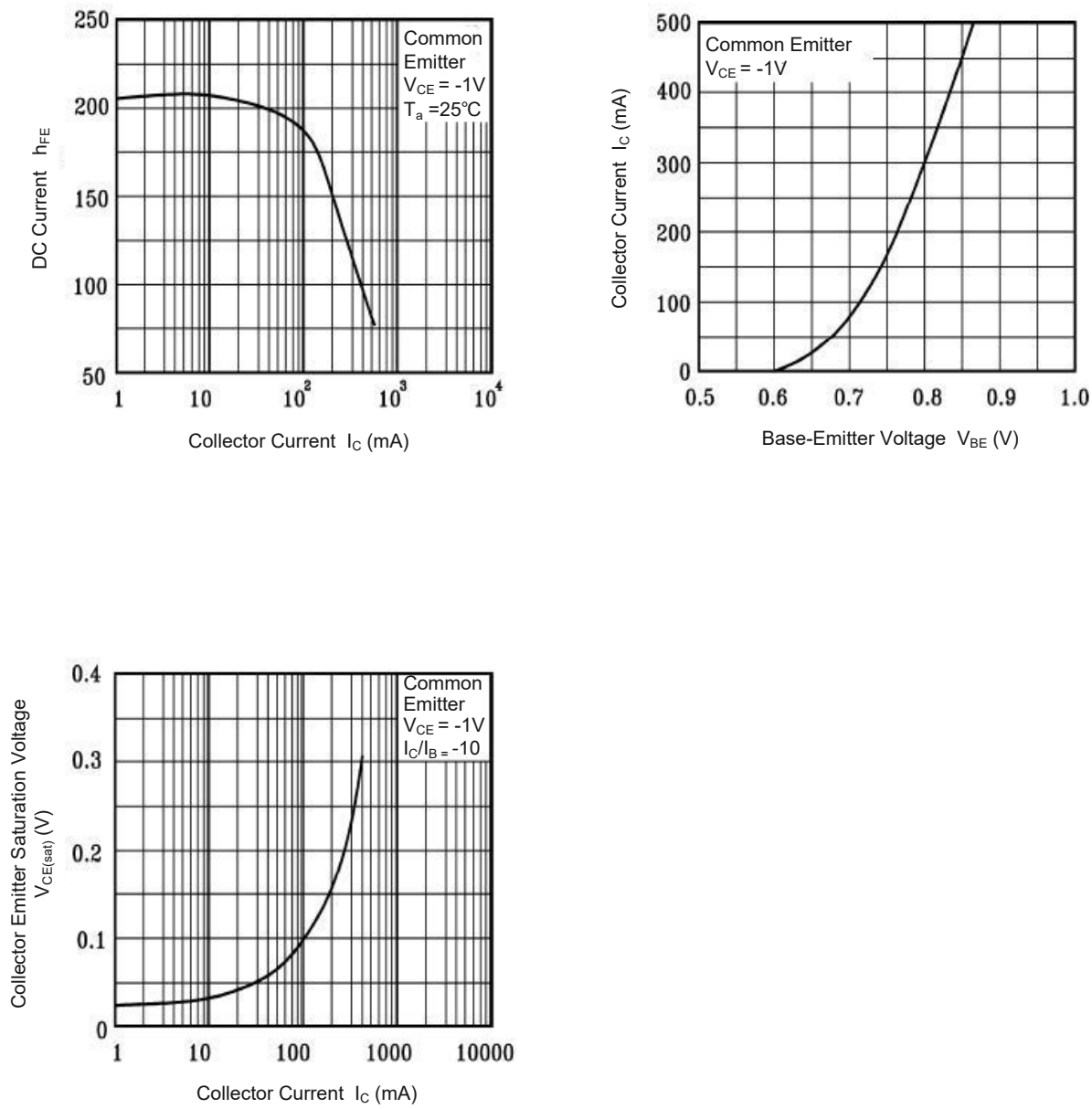
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	45	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Maximum Power Dissipation	P_D	950	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics (TA=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at VCE = -1 V, IC = -100 mA	HFE	100	--	250	--
Gain Group -16		160	--	400	
-25		250	--	600	
at VCE = -1 V, IC = -500 mA		40	--	--	
Collector Base Cutoff Current	-ICBO	--	--	100	nA
at VCB = -20V					
Emitter Base Cutoff Current	-IEBO	--	--	100	nA
at VEB = -5 V					
Collector Emitter Saturation Voltage	-VCE(sat)	--	--	0.7	V
at IC = -500 mA, IB = -50 mA					
Base Emitter On Voltage	-VBE(on)	--	--	1.2	V
at VCE = -1 V, IC = -500 mA					
Transition Frequency	FT	80	--	--	MHz
at VCE = -5 V, IC = -10 mA, f = 50 MHz					
Output Capacitance	Cob	--	9	--	pF
at VCB = -10 V, f = 1 MHz					

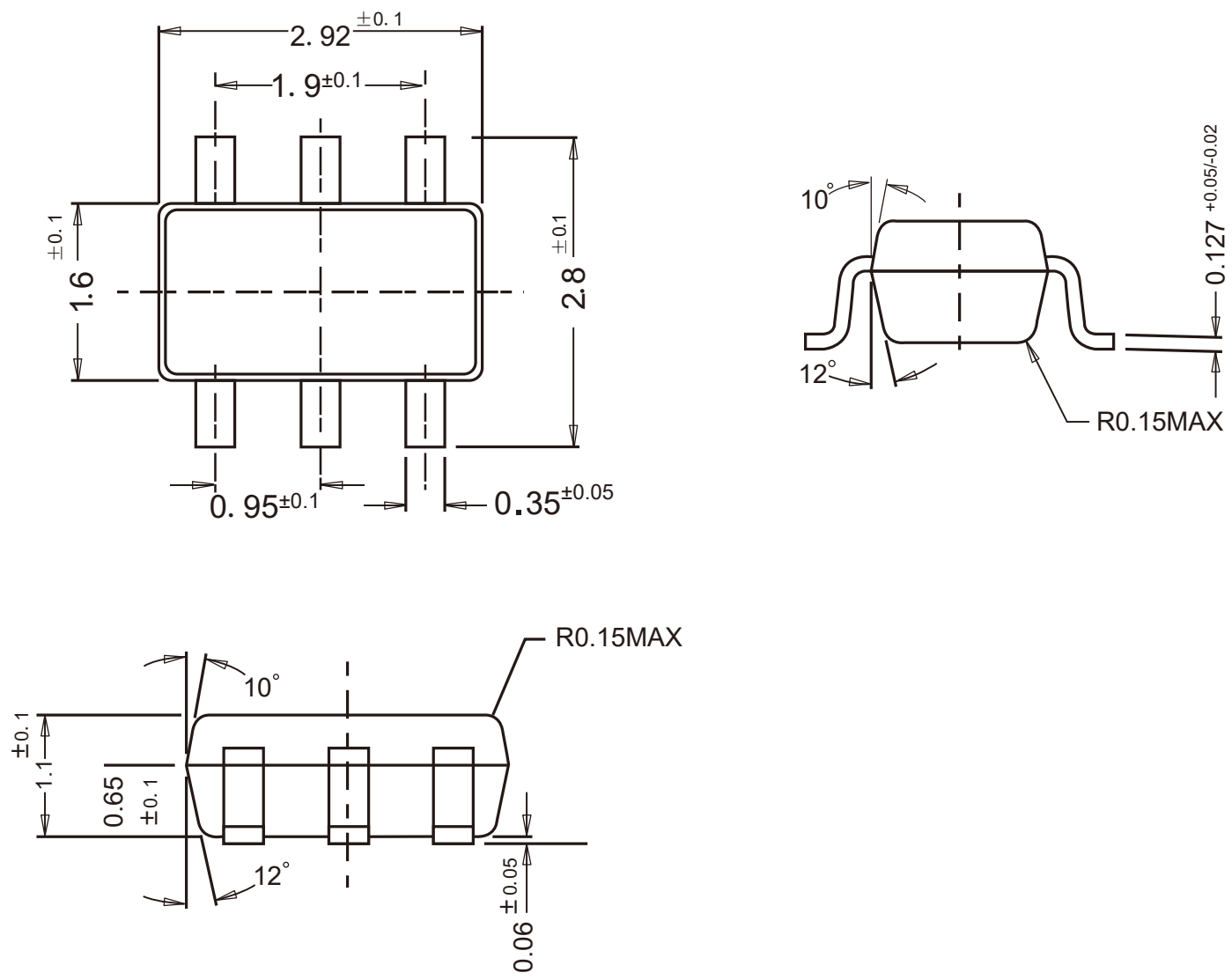
Typical Characteristic Curves



Package Outline

SOT-23-6

Dimensions in mm

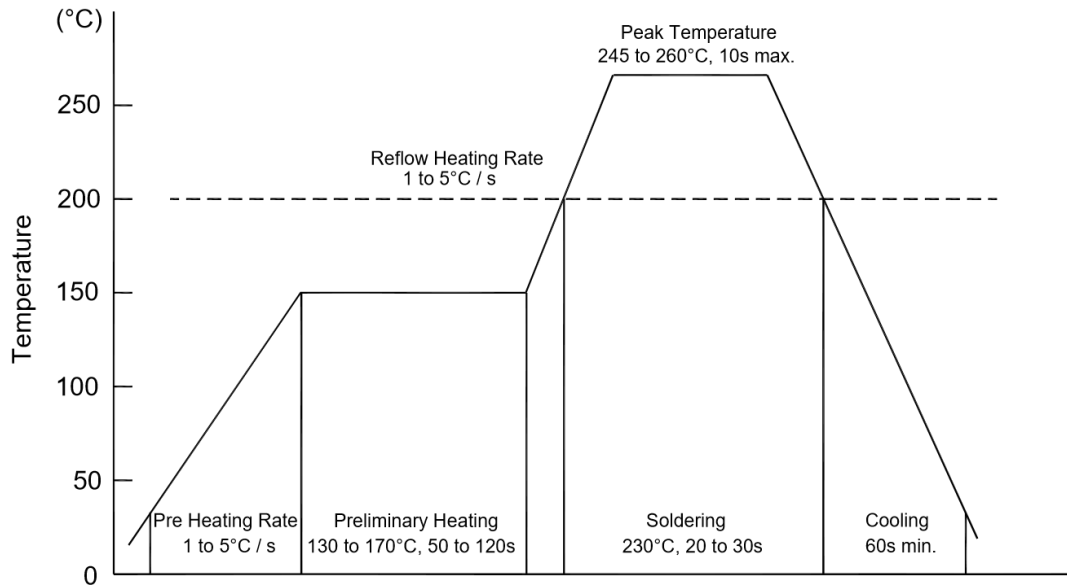


Ordering Information

Device	Package	Shipping
BC807SG	SOT-23-6	3,000PCS/Reel&7inches

Conditions of Soldering and Storage

◆ Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters:

- Time length of peak temperature (longer)
- Time length of soldering (longer)
- Thickness of solder paste (thicker)

◆ Conditions of hand soldering

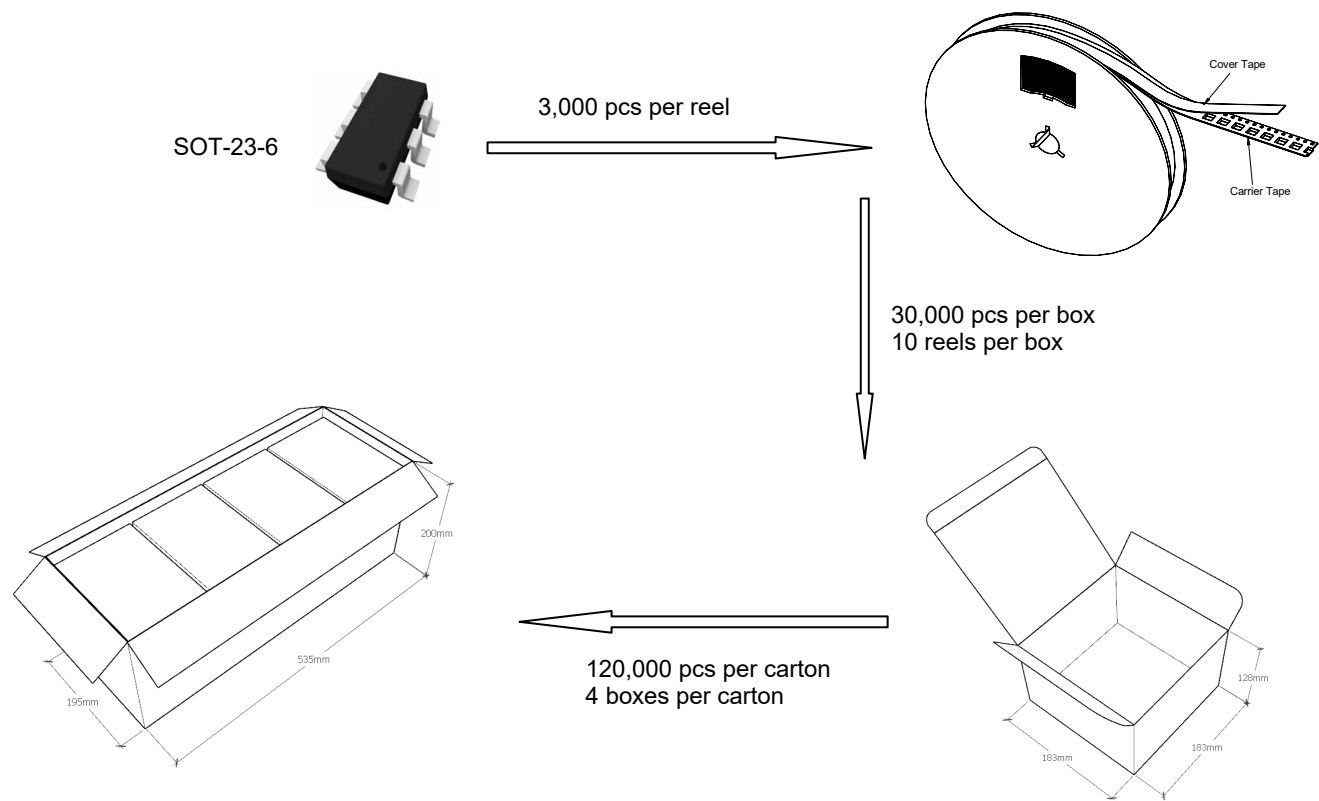
- Temperature: 370 °C
- Time: 3s max.
- Times: one time

◆ Storage conditions

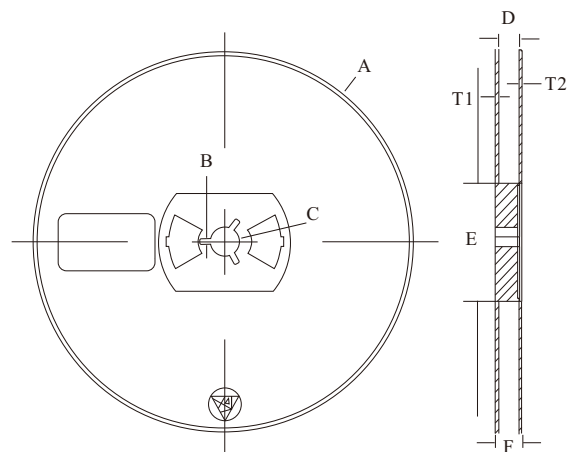
- **Temperature**
5 to 40 °C
- **Humidity**
30 to 80% RH
- **Recommended period**
One year after manufacturing

Package Specifications

- The method of packaging

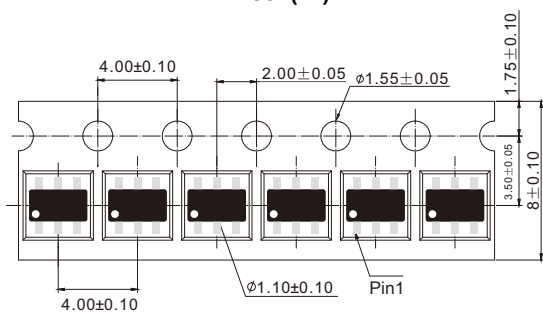


◆ Embossed tape and reel data



Symbol	Value (unit: mm)
A	Ø 177.8±1
B	2.7±0.2
C	Ø 13.5±0.2
E	Ø 54.5±0.2
F	12.3±0.3
D	9.6+2/-0.3
T1	1.0±0.2
T2	1.2±0.2

Reel (7")



Tape (8mm)

Contact Information

TANI website: <http://www.tanisemi.com> Email: tani@tanisemi.com

For additional information, please contact your local Sales Representative.



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Product Specification Statement

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. TANI shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and TANI assumes no responsibility for the application of the product. TANI strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, TANI cannot guarantee that the information provided in the product specification is entirely accurate and error-free.

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