BC859

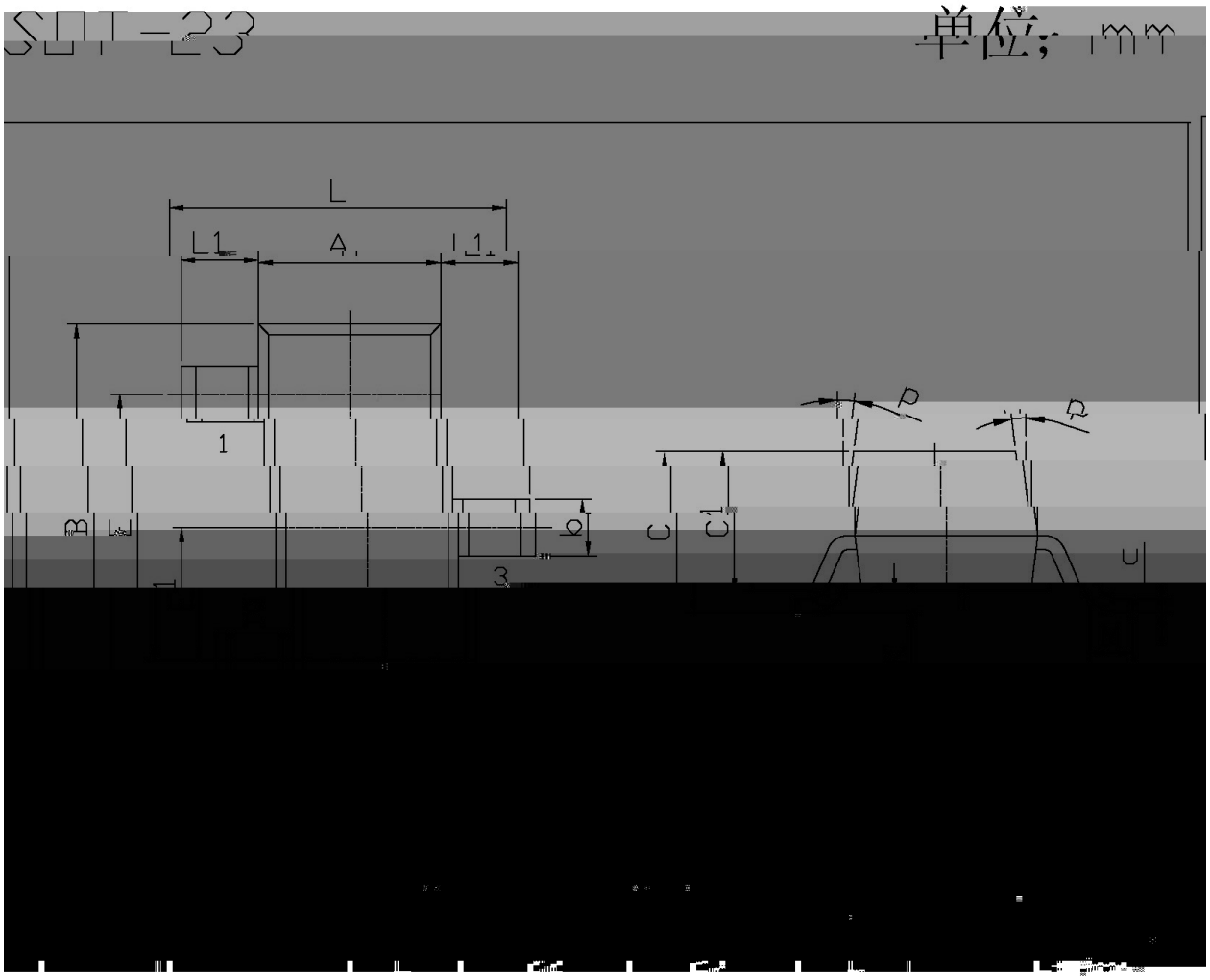
/ Absolute Maximum Ratings(Ta=25)

v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	55 150	

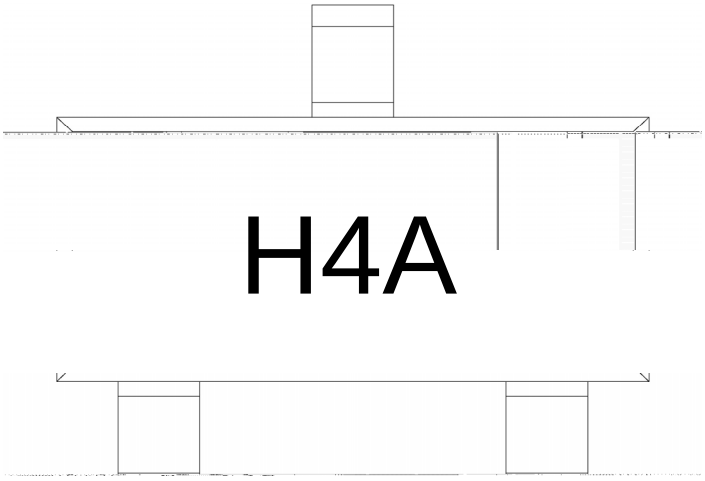
/ Electrical Characteristics(Ta=25)

v ̈Ω̣ Parameter	ɬ N Symbol	⊥ ;ɬ Ţ Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-10mA I_B=0	-30			V
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-10 A I_E=0	-30			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10 A I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.015	A
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-2.0mA	125		475	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	I_C=-10mA I_B=-0.5mA		-0.075	-0.3	V
	$V_{CE(sat)(2)}$	I_C=-100mA I_B=-5.0mA		-0.25	-0.65	V
Base to Emitter Saturation Voltage	$V_{BE(sat)(1)}$	I_C=-10mA I_B=-0.5mA		-0.7		V
	$V_{BE(sat)(2)}$	I_C=-100mA I_B=-5.0mA		-0.85		V
Base to Emitter Voltage	$V_{BE(ON)(1)}$	V_{CE}=-5.0V I_C=-2.0mA	-0.6	-0.65	-0.75	V
	$V_{BE(ON)(2)}$	V_{CE}=-5.0V I_C=-10mA			-0.82	V
Transition Frequency	f_T	V_{CE}=-5.0V I_C=-10mA f=100MHz		150		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		4.5		pF
Noise Figure	NF	V_{CE}=-5.0V I_C=-200 A R_g=10K f=1.0KHz			4.0	dB

/ Package Dimensions



/ Marking Instructions



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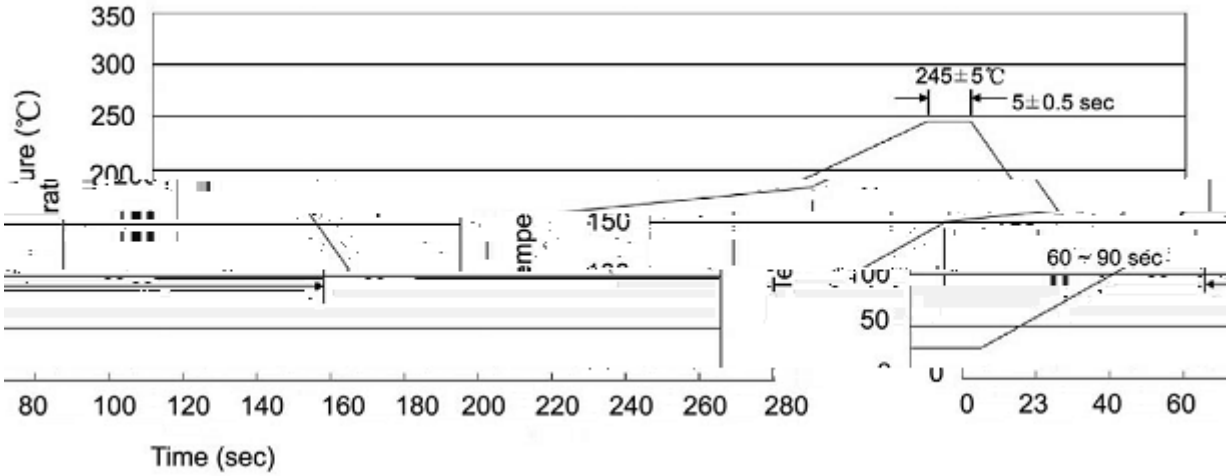
7D χ ⌘ ⅔ ᴺ ⅂

Note:

H: Company Code.

4A: Product Type Code

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



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1 ǂ ♬ □ ỷ 25 Ḱ 150 ł ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 245 ° 5 ł ı `H ڑ ˙Y ⺈ ⺮ 5 ° 0.5sec;

3 ì ˙ ⺈ ˛ ɔ ھ ỷ ⺮ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:25~150 ł , Time:60~90sec.

2.Peak Temp.:245 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

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