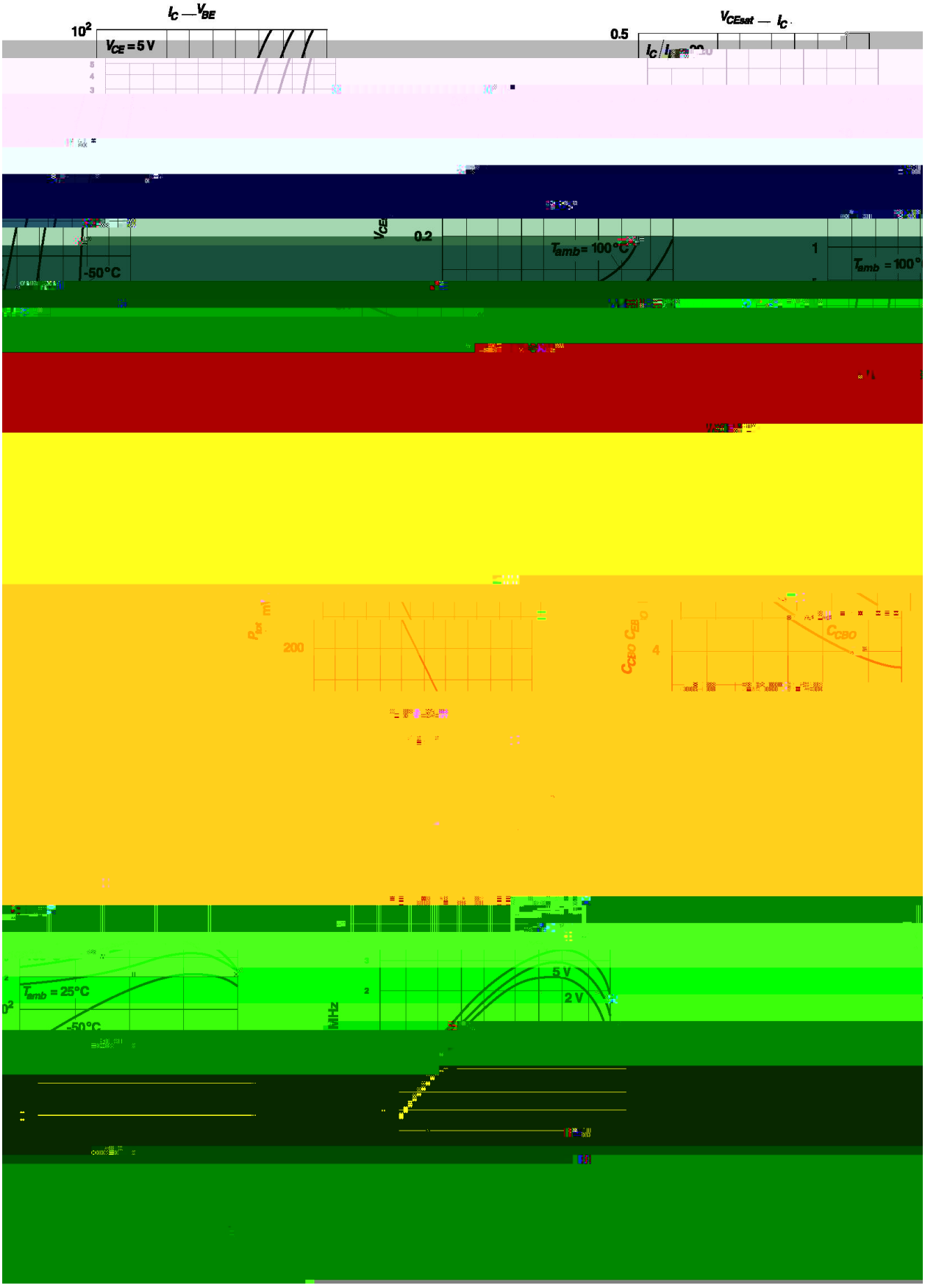
SOT-23 NPN

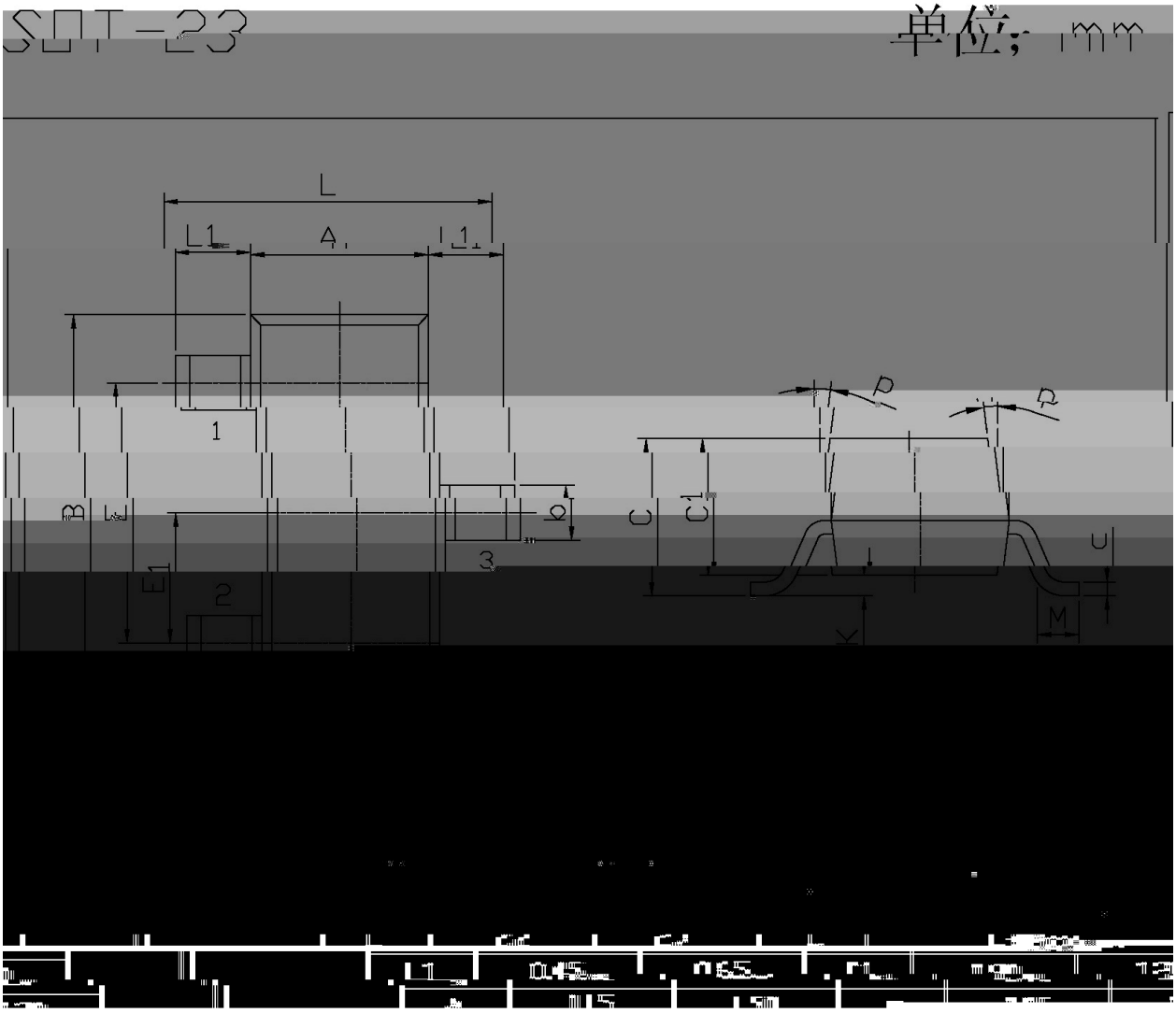
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	65	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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	110		450	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	I_C=10mA I_B=0.5mA		0.09	0.25	V
	$V_{CE(sat)(2)}$	I_C=100mA I_B=5.0mA		0.2	0.6	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		0.9		V
Base to Emitter Voltage	$V_{BE(1)}$	V_{CE}=5.0V I_C=2.0mA	0.58		0.7	V
	$V_{BE(2)}$	V_{CE}=5.0V I_C=10mA			0.75	V
Transition Frequency	f_T	V_{CE}=5.0V I_C=10mA f=100MHz		300		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V I_E=0 f=1.0MHz		2.5	4.5	pF

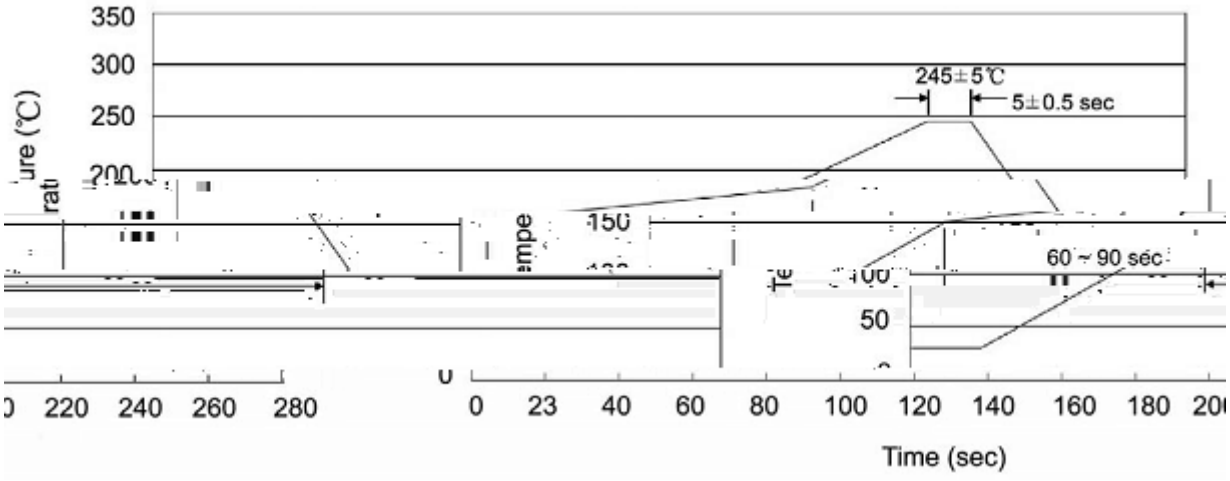
/ Electrical Characteristic Curve



/ Package Dimensions



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



Note:

1	25	150	60	90sec;	1.Preheating:25~150 , Time:60~90sec.
2	245±5			5±0.5sec;	2.Peak Temp.:245±5 , Duration:5±0.5sec.
3		2	10	/sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-23	3,000	10	30,000	6	180,000	7 ρ ×8	180×120×180	390×385×205