

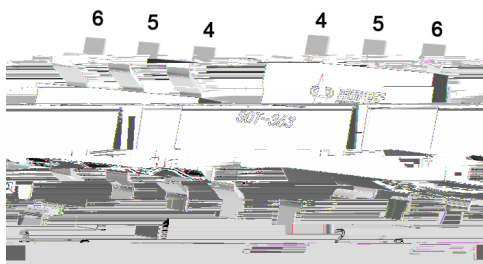
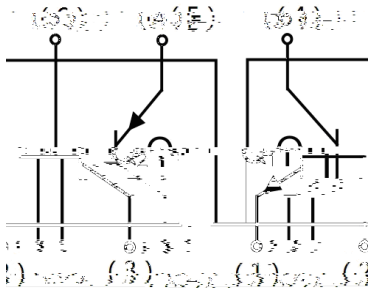
Rev.B Aug.-2023

SOT-363 PNP+NPN

Silicon PNP and NPN transistor in a SOT-363 Plastic Package.

Low current ,Low voltage ,S-mini package,HF Product.

General purpose amplifier and switching.



PIN 1 4 Emitter

PIN 2 5 Base

PIN 3 6 Collector

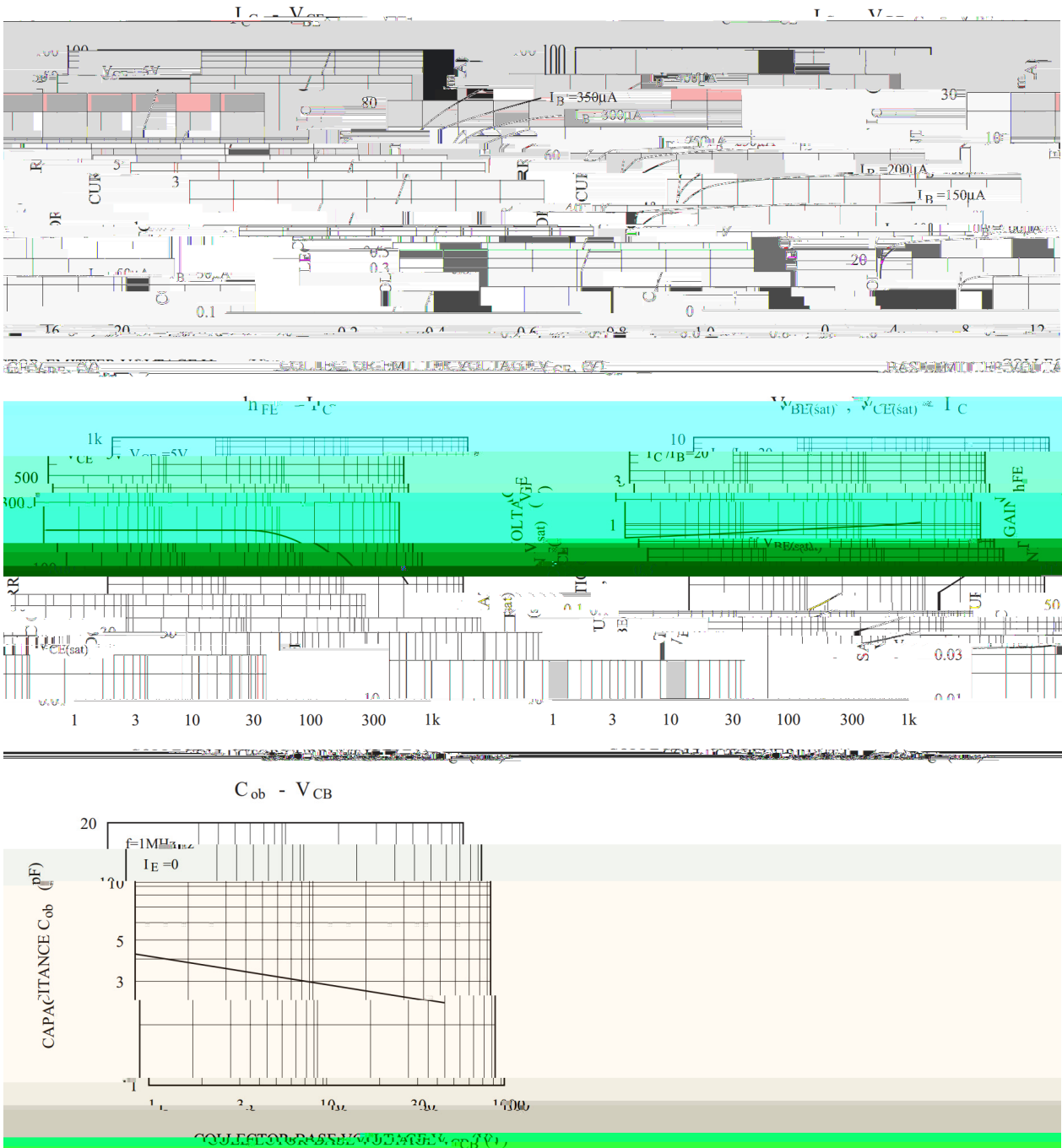
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

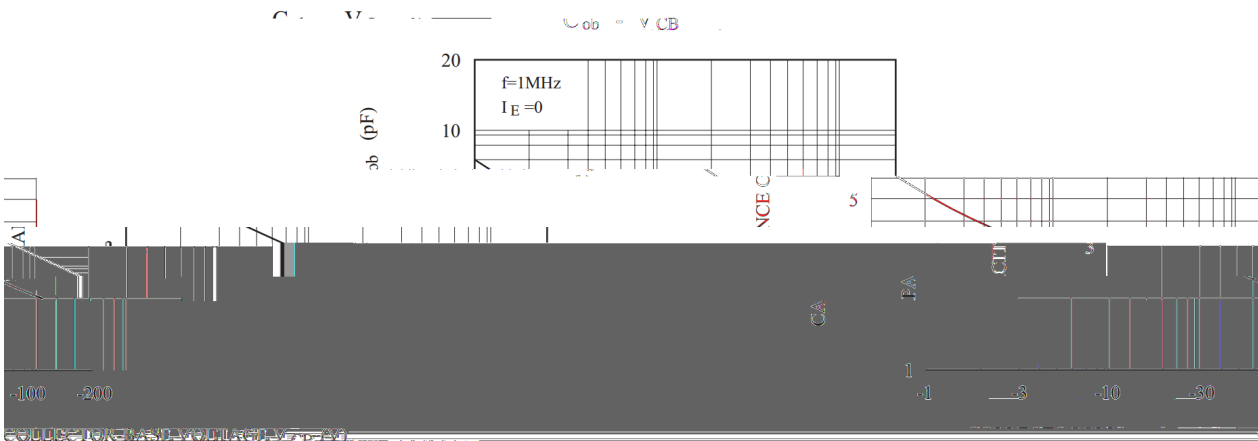
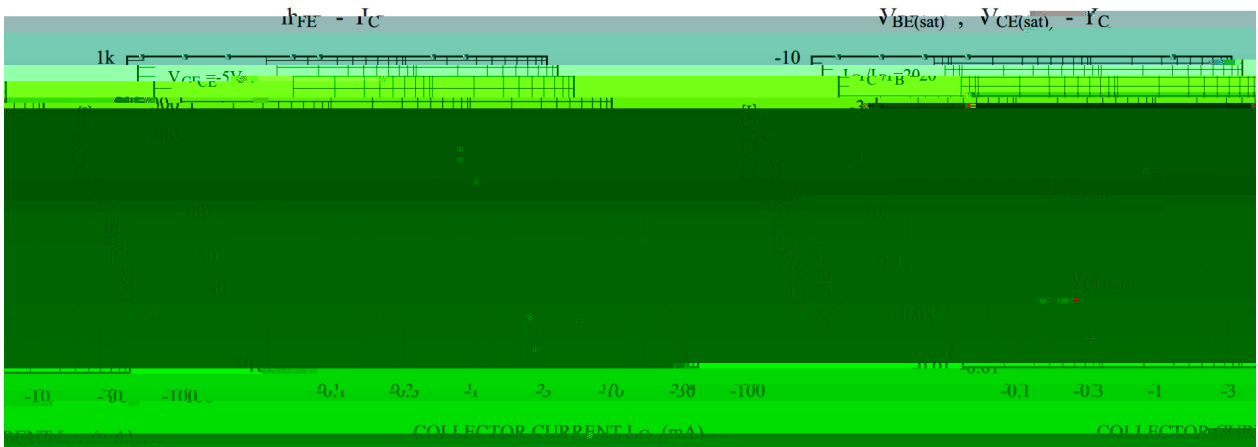
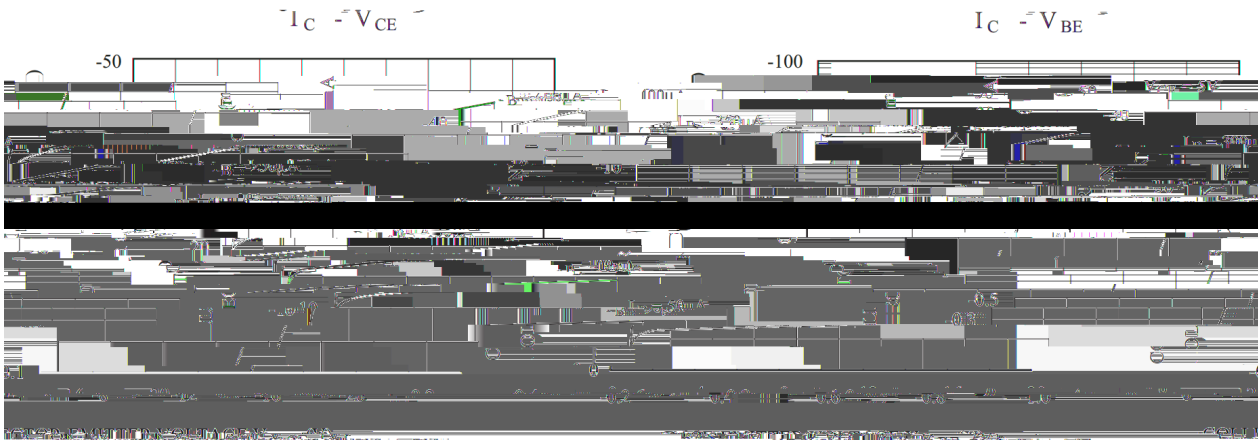
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Collector Power Dissipation	P_C	250	mW
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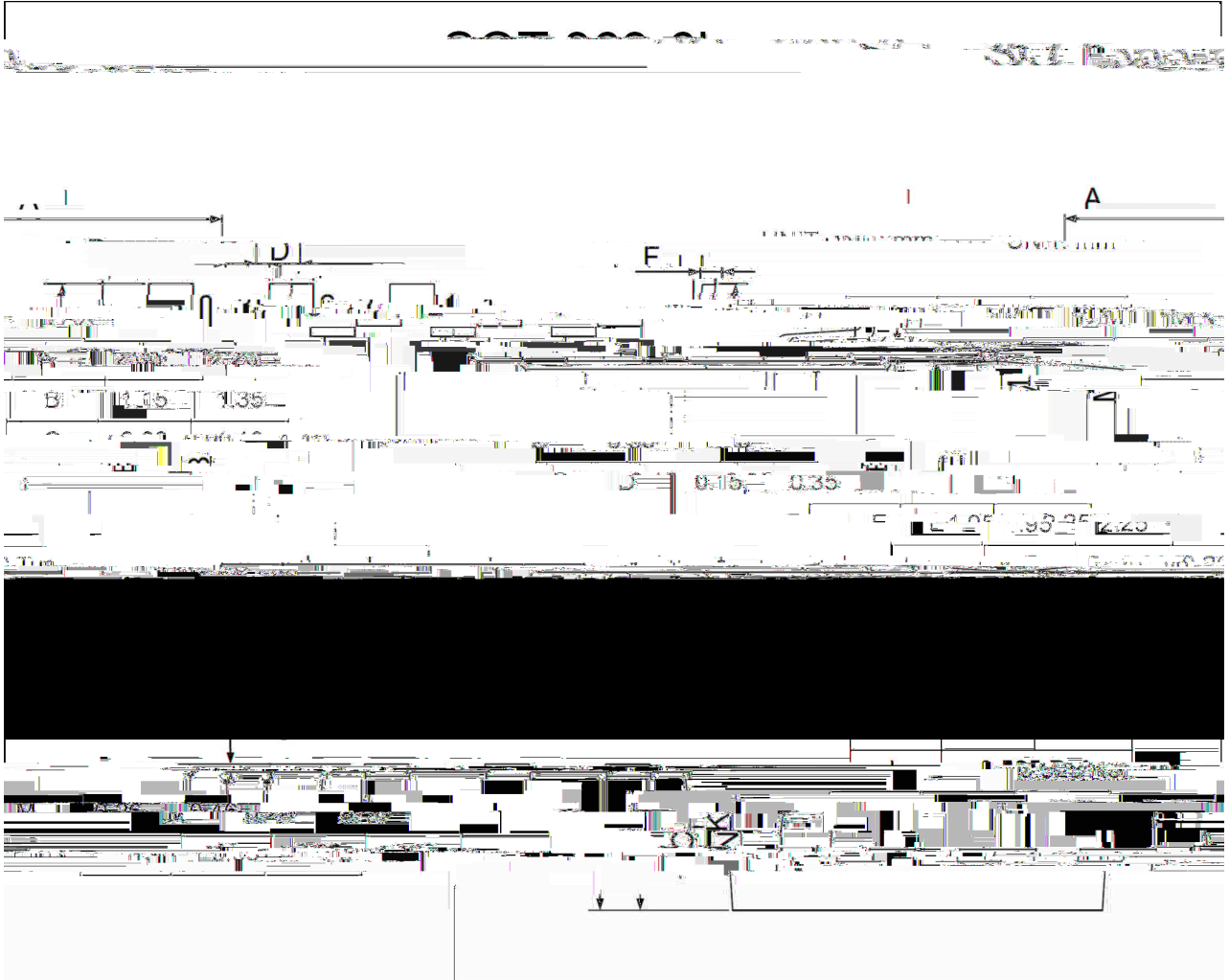
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I _{CBO}	V _{CB} =30V I _E =0			15	nA
		V _{CB} =30V I _E =0 T _J =150			5	A
Emitter Cut-Off Current	I _{EBO}	V _{EB} =6.0V I _C =0			100	nA
DC Current Gain	h _{FE}	V _{CE} =5.0V I _C =2.0mA	200		450	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA I _B =0.5mA			250	mV
		I _C =100mA I _B =5.0mA			600	mV
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =10mA I _B =0.5mA		700		mV
		I _C =100mA I _B =5.0mA		900		mV
Base-emitter voltage	V _{BE}	V _{CE} =5.0V I _C =2.0mA	580		700	mV
		V _{CE} =5.0V I _C =10mA			750	mV
Transition Frequency	f _T	V _{CE} =5.0V I _C =10mA f=100MHz		300		MHz
Collector Capacitance	C _{ob}	V _{CB} =10V f=1.0MHz I _E =i _e =0A		2.5	4.5	pF
Noise figure	NF	V _{CE} =6.0V I _C =0.1mA R _S				

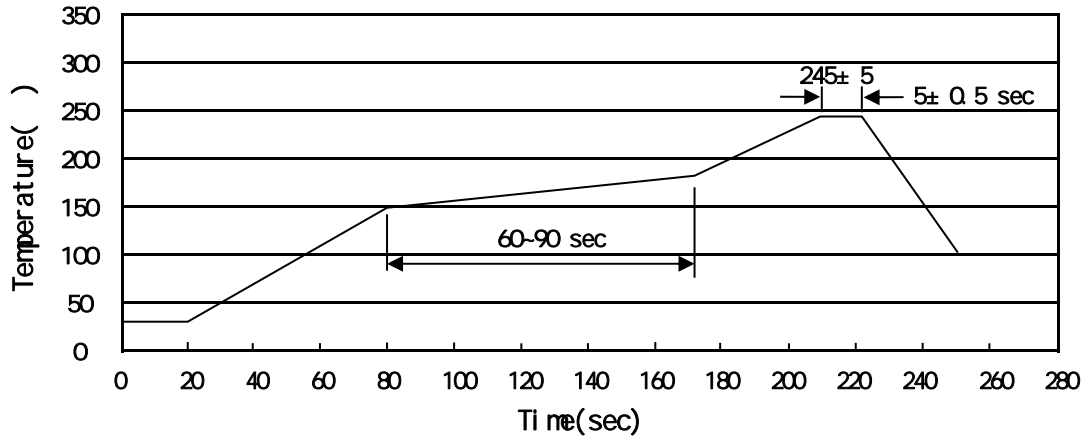
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I _{CBO}	V _{CB} =-30V I _E =0			-15	nA
		V _{CB} =-30V I _E =0 T _J =150			-5.0	A
DC Current Gain	h _{FE}	V _{CE} =-5.0V I _C =-2.0mA	200		450	

Collector







Temperature Profile for IR Reflow Soldering(Pb-Free)


Note:

- | | | | | | |
|---|-------|-----|-------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-363	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205