A	2016-5				
B	2019-4-20				
C	2021-10-26	4			

/ Descriptions

SOT-363 PNP

Double silicon PNP transistor in a SOT-363 Plastic Package.

/ Features

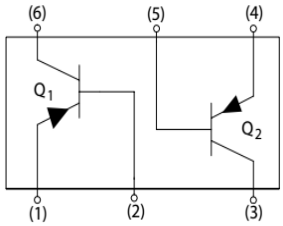
h_{FE} $V_{CE(sat)}$

High DC Current Gain, Low Collector to Emitter Saturation Voltage. HF Product.

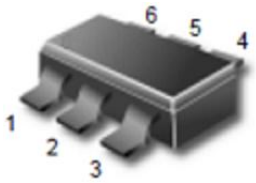
/ Applications

General purpose amplifier and switching.

/ Equivalent Circuit



/ Pinning



PIN 1 4 Emitter PIN 2 5 Base PIN 3 6 Collector

/ h_{FE} Classifications & Marking

See Marking Instructions.

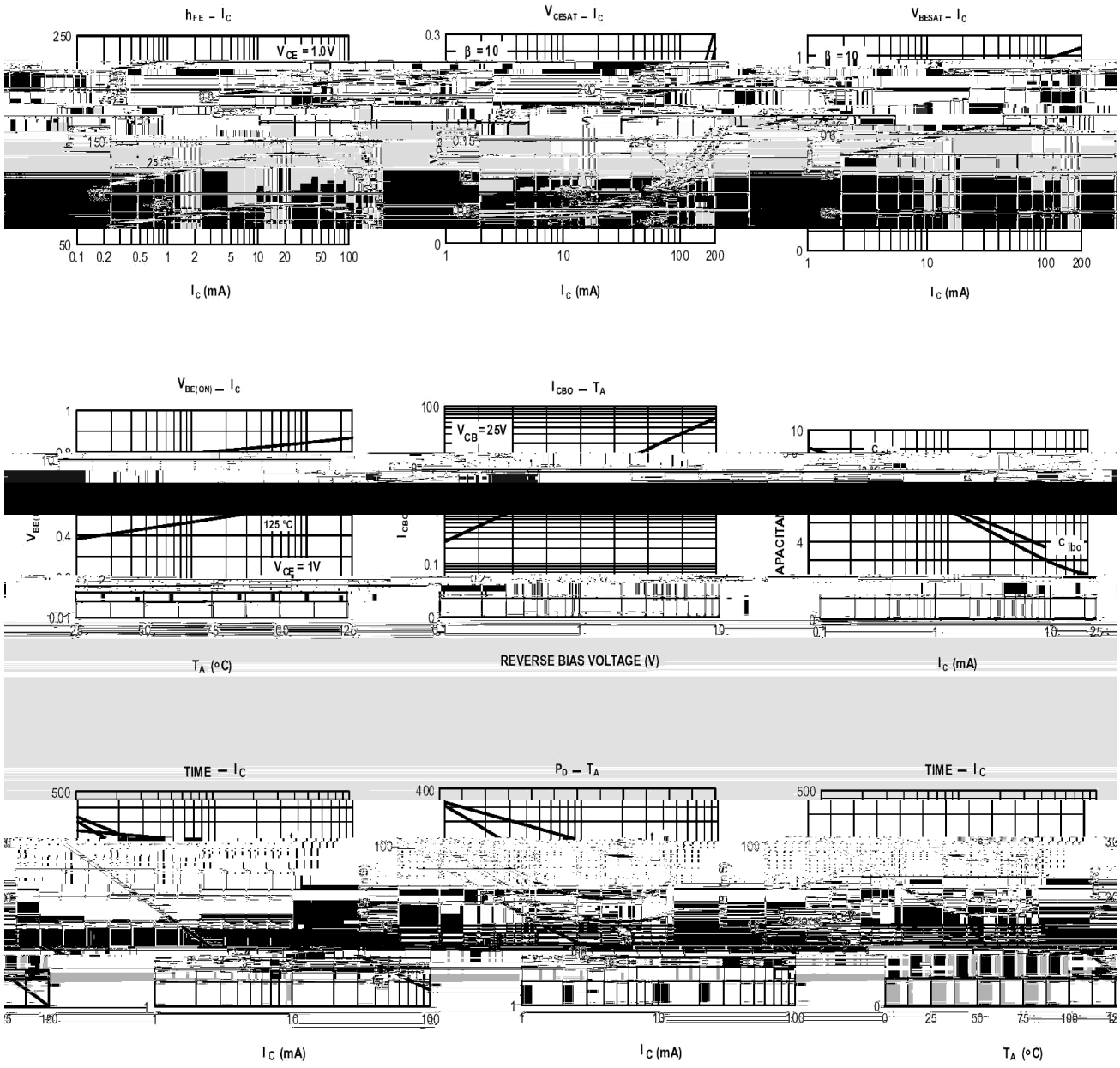
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-40	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-200	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

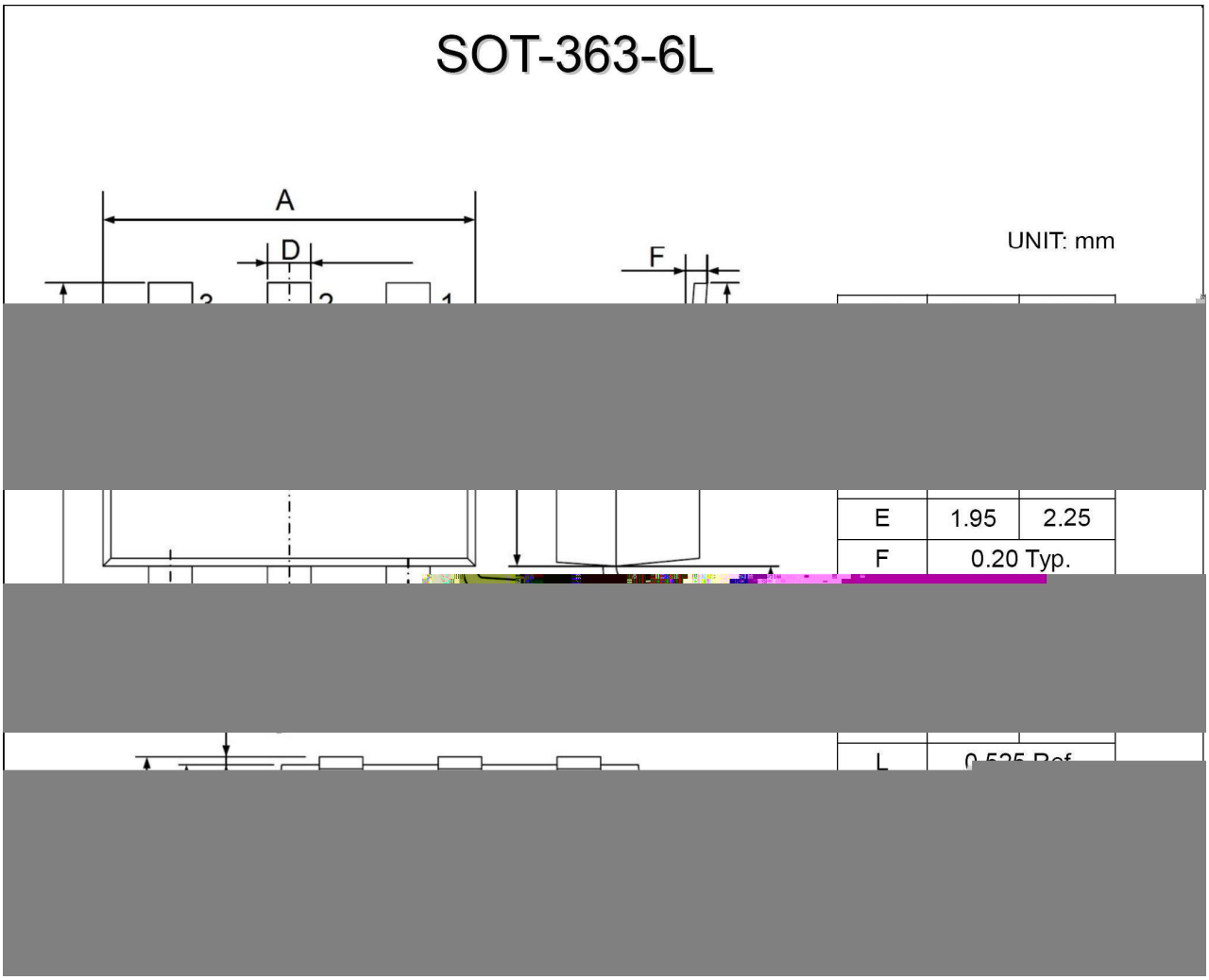
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-10μA I_E=0	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-40			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.05	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-3.0V I_C=0			-0.05	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-10mA	100		300	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-100mA	30			
	$h_{FE(3)}$	V_{CE}=-1.0V I_C=-50mA	60			
	$h_{FE(4)}$	V_{CE}= -1.0V I_C=-1.0mA	80			
	$h_{FE(5)}$	V_{CE}=-1.0V I_C=-0.1mA	60			
Collector-Emitter Saturation voltage	$V_{CE(sat)\ (1)}$	I_C=-10mA I_B=-1.0mA			-0.25	V
	$V_{CE(sat)\ (2)}$	I_C=-50mA I_B=-5.0mA			-0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)\ (1)}$	I_C=-10mA I_B=-1.0mA	-0.65		-0.85	V
	$V_{BE(sat)\ (2)}$	I_C=-50mA I_B=-5.0mA			-0.95	V
Transition Frequency	f_T	V_{CE}=-20V I_C=-10mA f=100MHz	250			MHz
Output Capacitance	C_{ob}	V_{CB}=-5.0V f=1.0MHz			4.5	pF
Storage Time	t_{stg}	V_{CC}=-3.0V I_C=-10mA I_{B1}=-I_{B2}=-1.0mA			225	ns
Fall Time	t_f	V_{CC}=-3.0V I_C=-10mA I_{B1}=-I_{B2}=-1.0mA			75	ns
Delay Time	t_d	V_{CC}=-3.0V V_{BE}=-0.5V I_C=-10mA I_{B1}=-1.0mA			35	ns
Rise Time	t_r	V_{CC}=-3.0V V_{BE}=-0.5V I_C=-10mA I_{B1}=-1.0mA			35	ns
Input Capacitance	C_{ib}	V_{EB}=-0.5V f=1.0MHz			10	pF

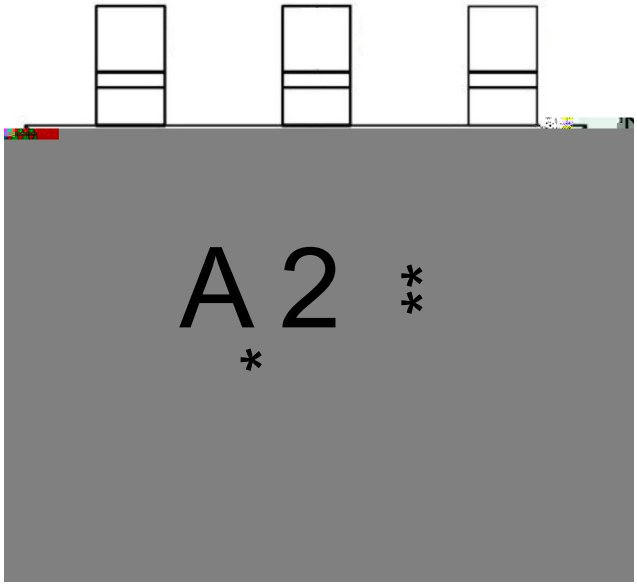
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



● 1

A2

***:

Note:

● "1" Pin

A2 Product Type Code

***: Lot No. Code, code change with Lot No.

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

说明：

1、预热温度 150～180℃，时间 60～90sec;

2、峰值温度 245±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2～10℃/sec.

Note:

1.Preheating:150~180℃, Time:60~90sec.

2.Peak Temp.:245±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

温度：260±5℃ 时间：10±1 sec. Temp.:260±5℃ Time:10±1 sec

/ Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量