



/ Descriptions

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

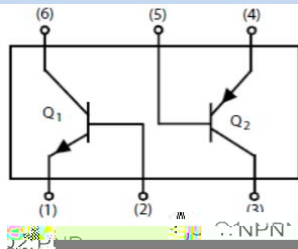
/ Features

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.



Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	200	mA
Collector Power Dissipation	P_C	200	mW
	$*P_C$	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	/W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

Parameter

Symbol

Rating

Unit

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	40			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	6.0			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
	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=10mA$	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

V

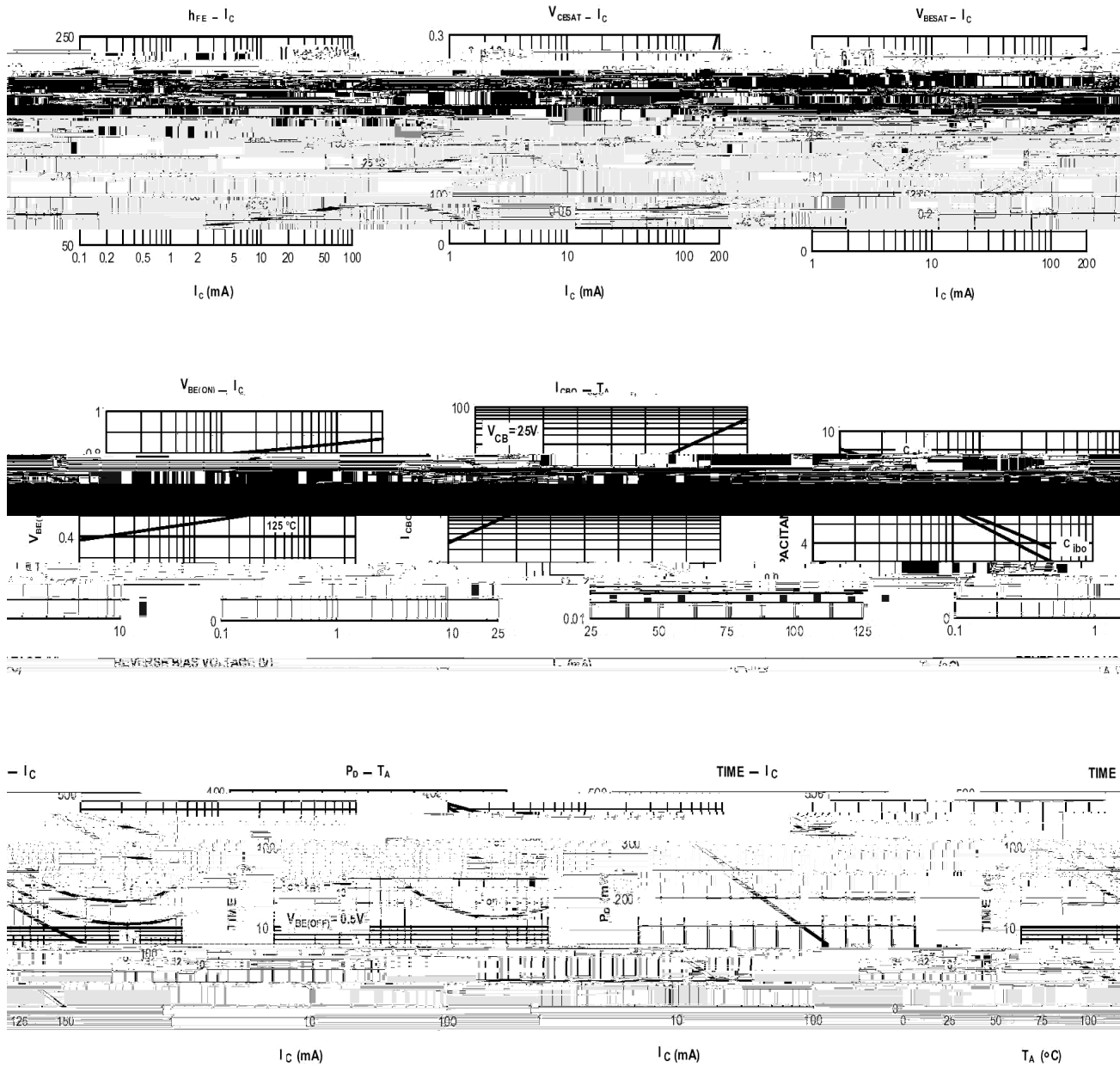
V

C

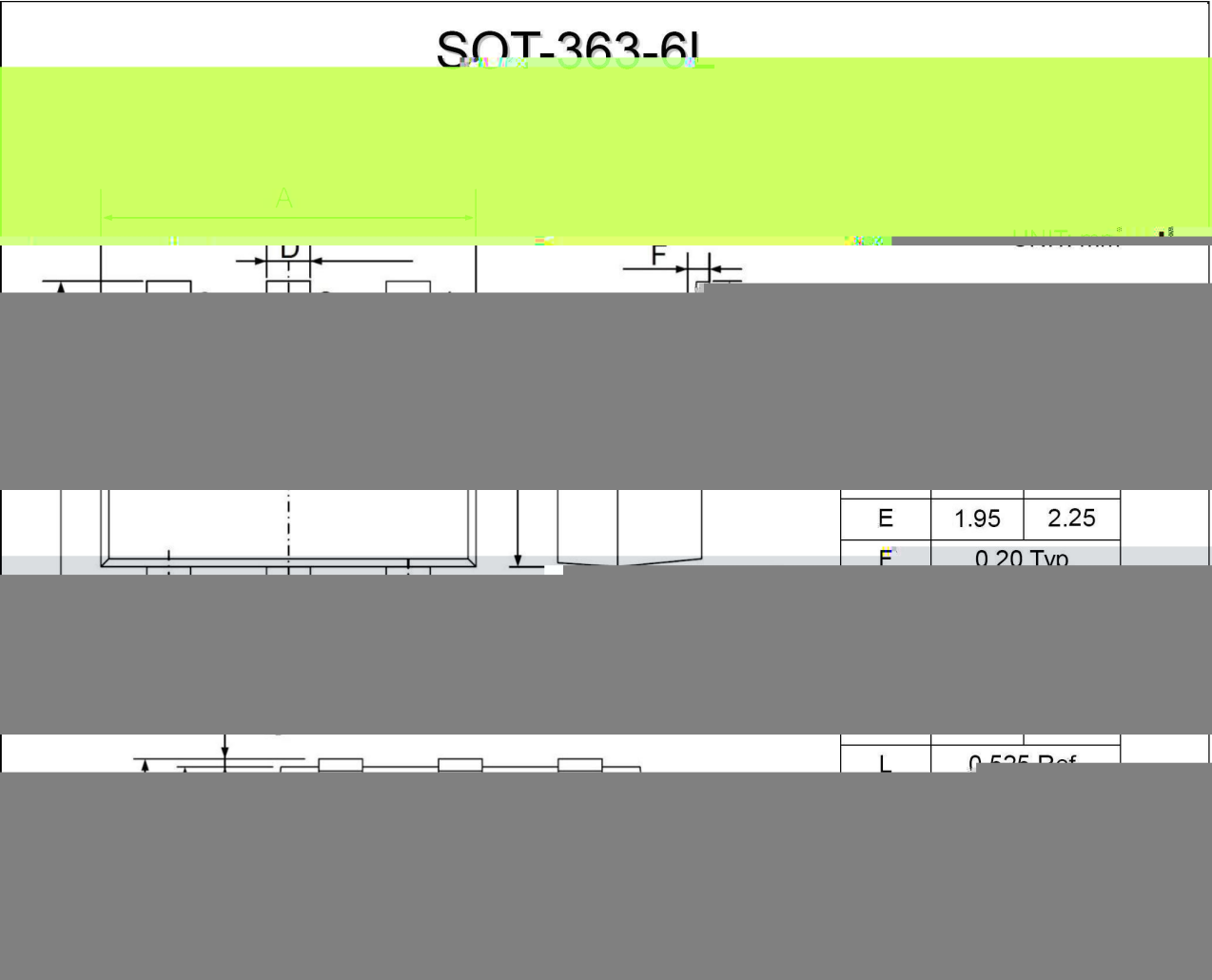
/ Electrical Characteristic Curve (NPN)



/ Electrical Characteristic Curve (PNP)



/ Package Dimensions



() / 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 0.5sec; | 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
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/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
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