



/ Revised record

A	2018-12-18				
B	2019-4-20				
C	2019-7-24	1			
D	2021-10-26	4			

/ Descriptions

SOT-363 NPN+PNP

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

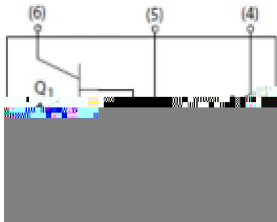
/ Features

Ideal for Low Power Amplification and Switching.HF Product.

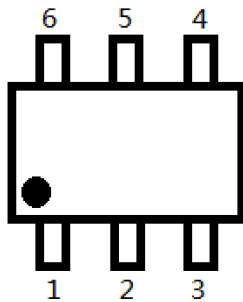
/ Applications

Power amplifier application.

/ Equivalent Circuit



/ Pinning



Pin 1: E2

Pin 2: B2

Pin 3: C1

Pin 4: E1

Pin 5: B1

Pin 6: C2

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Maximum Ratings, Total Device @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Rating	Unit
Total Power Dissipation	P_d	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and Storage and Temperature Range	T_j, T_{STG}	-55~150	$^\circ\text{C}$

/ Absolute Maximum Ratings($T_A=25^\circ\text{C}$) (NPN 2222A)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	75	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	600	mA

/ Absolute Maximum Ratings($T_A=25^\circ\text{C}$) (PNP 2907A)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-600	mA

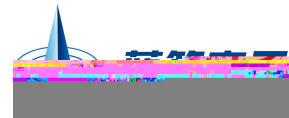
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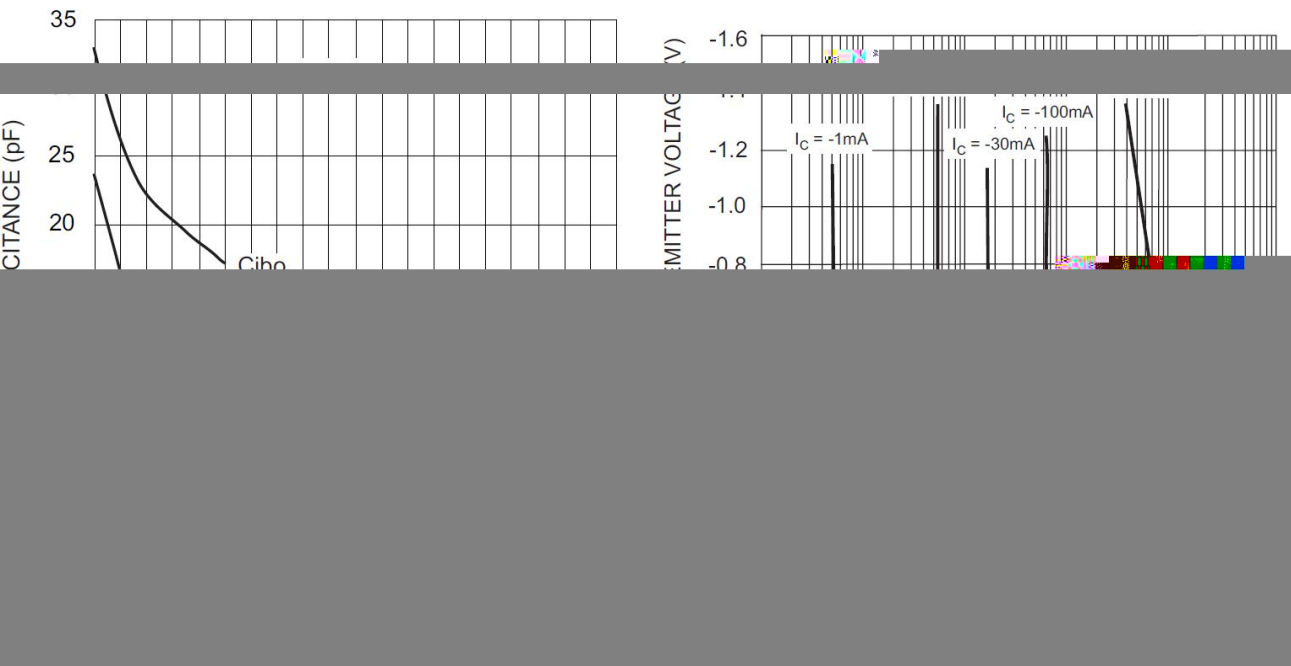
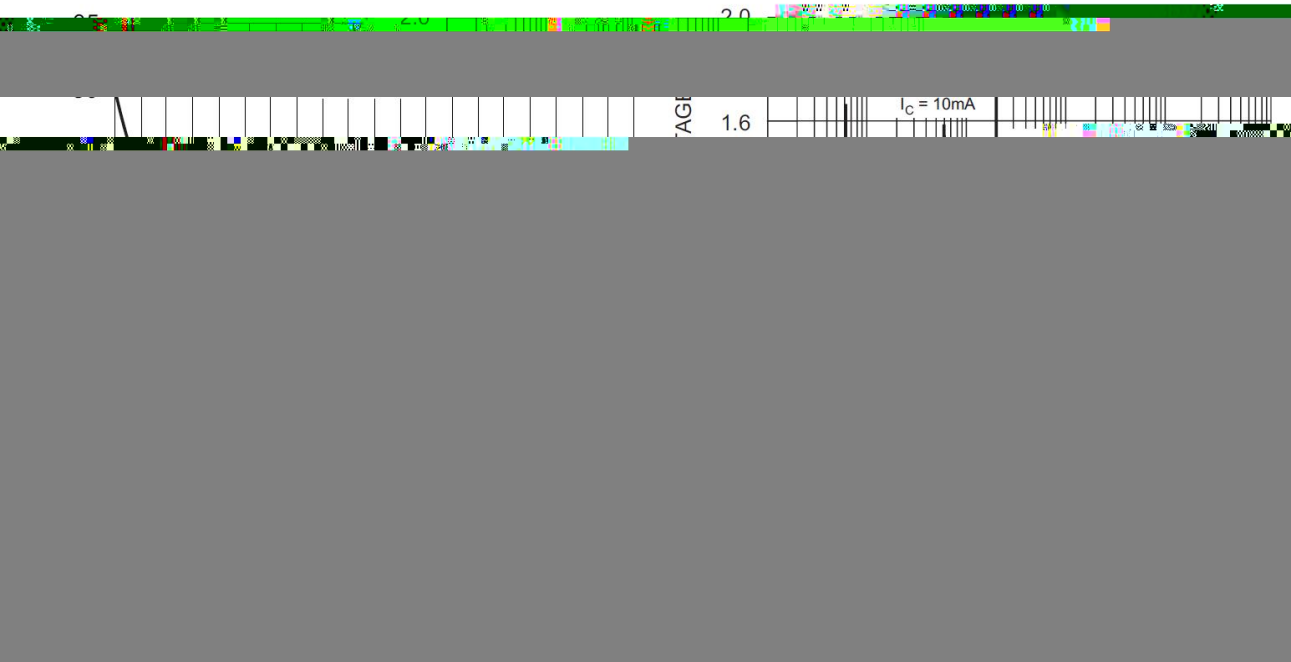
DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	$I_C = 10\text{ A}$ $I_E = 0$	75			V

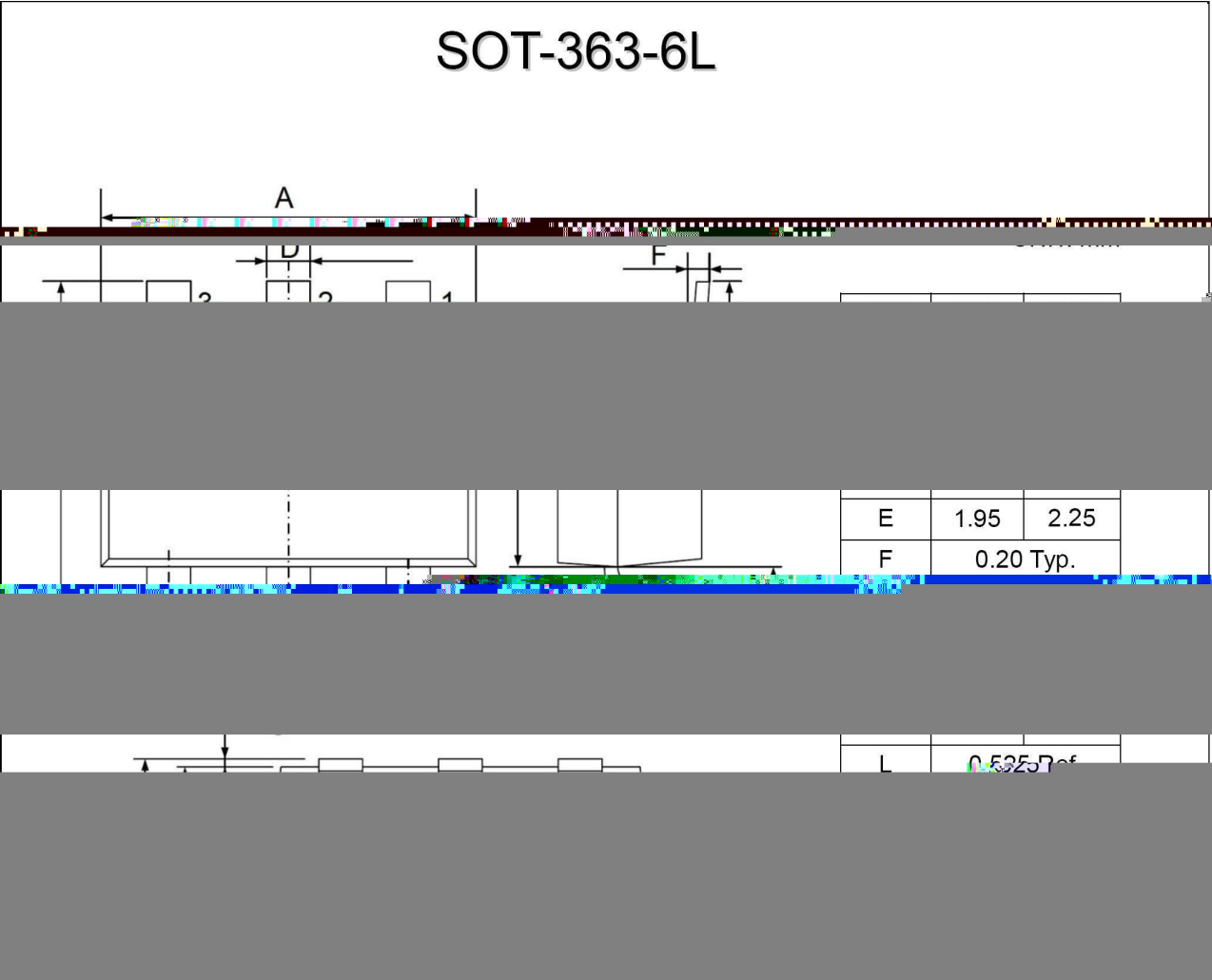


Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C = -10\mu A$ $I_E = 0$	-60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -10mA$ $I_B = 0$	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -10\mu A$ $I_C = 0$	-5.0			V
Collector Cut-Off Current 3 a@ W Collector Cutoff Current	I_{CBO}	$V_{CB} = -50V$ $I_E = 0$			-0.01	μA
	I_{CBO}	$V_{CB} = -50V$ $I_E = 0$ $T_A = 125^\circ C$			10	μA

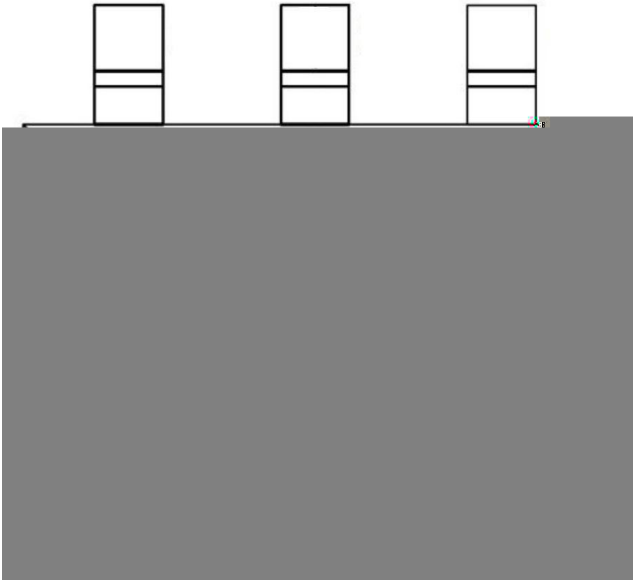
/ Electrical Characteristic Curve



/ Package Dimensions



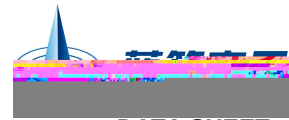
/ Marking Instructions



Note:



Product Type Code
Lot 1hp



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

Note:

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

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (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	Outer Box
SOT-363	3,000	10	30,000	6	180000	7" x8	180×120×180	390×385×205