

Rev.B Jul.-2023

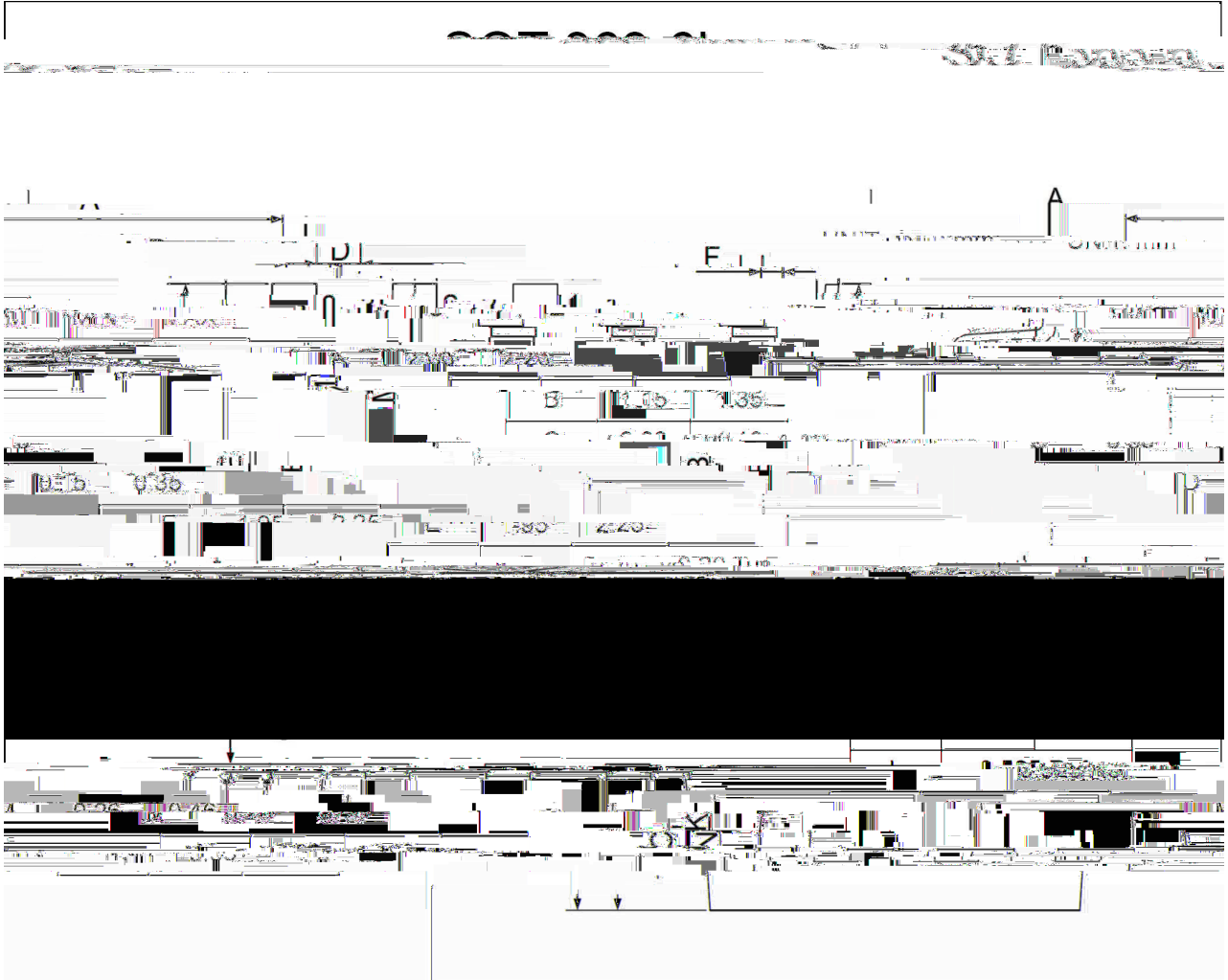
SOT-363 NPN Double silicon NPN transistor in a SOT-363 Plastic Package.

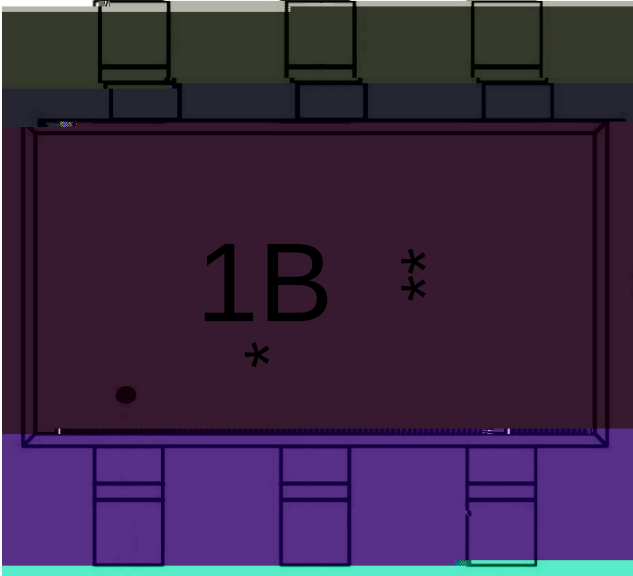
, BRDBC856WS

High voltage, complementary pair with BRDBC856WS, HF Product.

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	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	$I_C = 10\mu A$ I_E	80			V
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C = 10mA$ $I_B = 0$	65			V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E = 10\mu A$ $I_C = 0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 30V$ $I_E = 0$			15	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5V$ $I_C = 0$			500	nA
DC Current Gain	h_{FE}	$V_{CE} = 5.0V$ $I_C = 2.0mA$	110		450	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C = 10mA$ $I_B = 0.5mA$			0.1	V
	$V_{CE(sat)(2)}$	$I_C = 100mA$ $I_B = 5.0mA$			0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10mA$ $I_B = 0.5mA$		0.77		V
Transition Frequency	f_T	$V_{CB} = 5.0V$ $I_E = 10mA$ $f = 100MHz$				





“ 1 ”

1

B

h_{FE}

Note:



“ 1 ” Pin

1

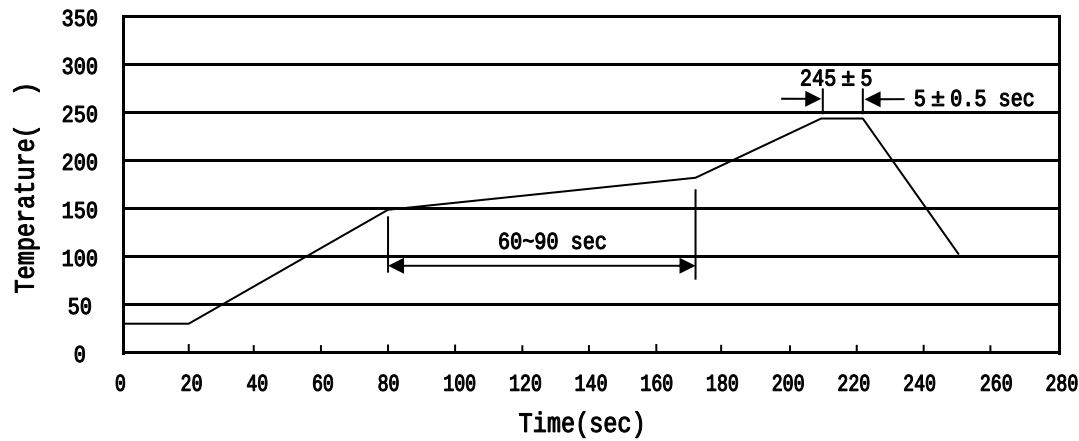
Product Type Code

B

h_{FE} Classifications Symbol Code

Lot No. Code, code change with Lot No

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 | /sec. | 3. Cooling Speed: 2~10 °C/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 ×8	180×120×180	390×385×205