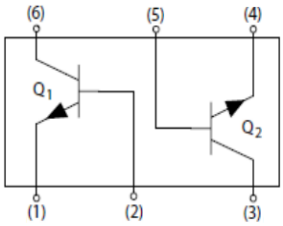
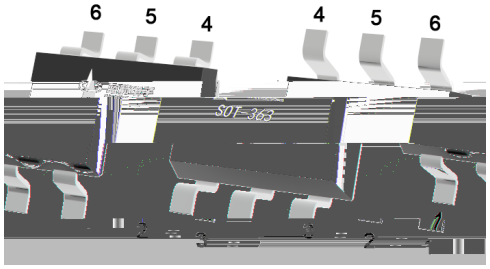
SOT-363 NPN Double silicon NPN transistor in a SOT-363 Plastic Package.

, BRDBC857
High voltage, complementary pair with BRDBC857,HF Product.

General purpose high voltage amplifier.





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

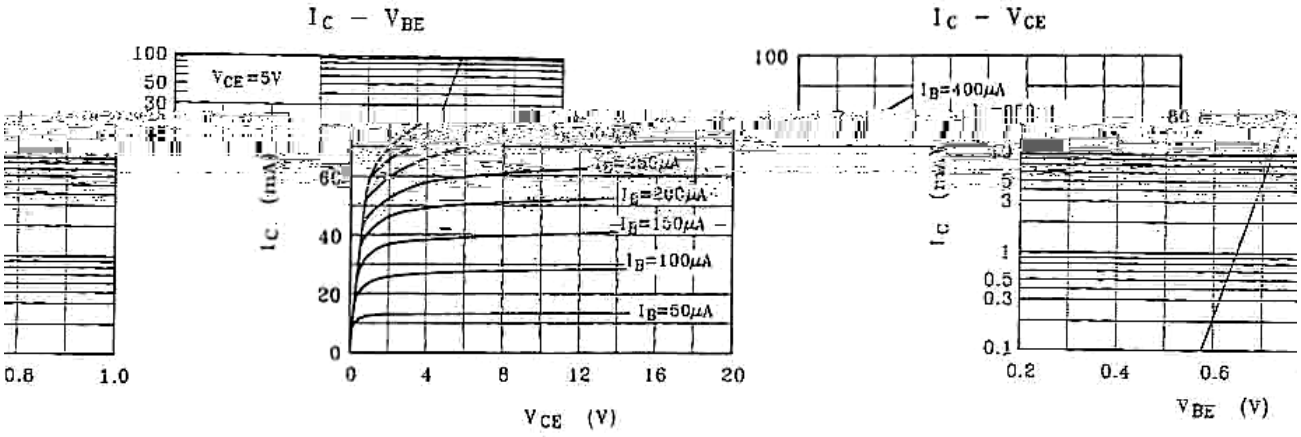
/ Absolute Maximum Ratings(Ta=25)

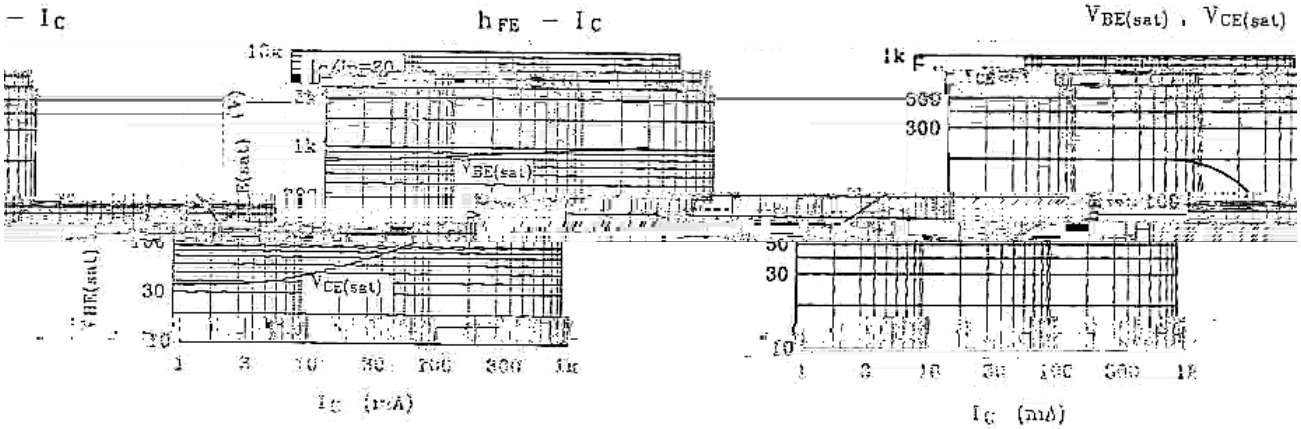
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	100	mA
Total Package Dissipation	P_D	380	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	328	/W
Junction Temperature	T_j	-55～+150	
Storage Temperature Range	T_{stg}	-55～+150	

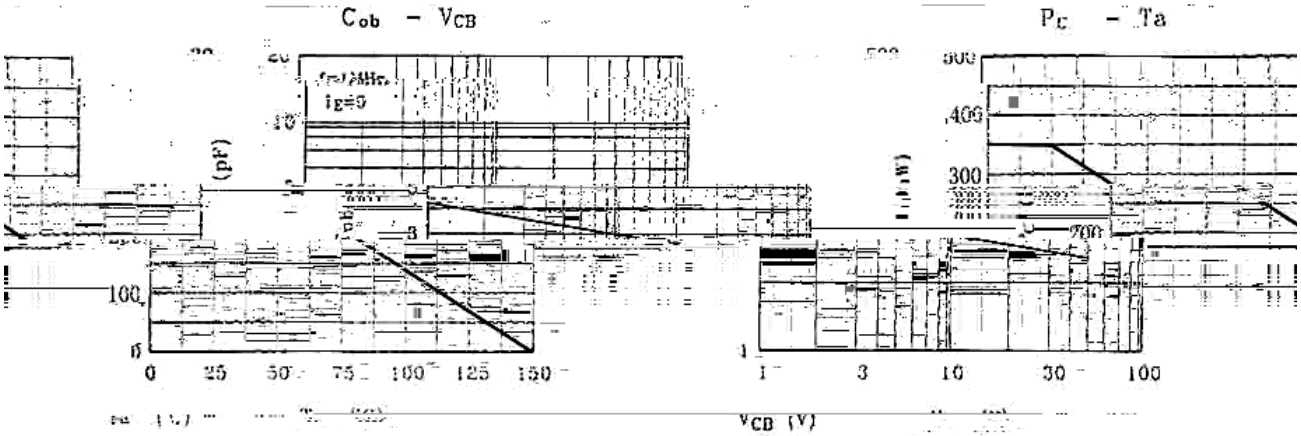
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Collector Base Breakdown Voltage	V_{CBO}	I_C =10μA	I_E=0	50			V
Collector Emitter Breakdown Voltage	V_{CEO}	I_C =10mA	I_B = 0	45			V
Emitter Base Breakdown Voltage	V_{EBO}	I_E =10μA	I_C = 0	6.0			V
Collector Emitter Breakdown Voltage	V_{CES}	I_C =10μA	V_{EB} = 0	50			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=30V	I_E=0			15	nA
		V_{CB}=30V T_A=150℃	I_E=0			5.0	A
DC Current Gain	h_{FE}	V_{CE}=5.0V	I_C=2.0mA	110		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA	I_B=0.5mA			0.25	V
		I_C=100mA	I_B=5.0mA			0.60	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA	I_B=0.5mA		0.70		V
		I_C=100mA	I_B=5.0mA		0.90		V
Base–Emitter Voltage	$V_{BE(on)}$	I_C=2.0mA	V_{CE}=5.0V	580	660	700	mV
		I_C=10mA	V_{CE}=5.0V			770	mV
Transition Frequency	f_T	V_{CE}=5.0V f=100MHz	I_C=10mA	100			MHz
Output Capacitance	C_{ob}	V_{CB}=10V	f=1.0MHz			4.5	pF
Noise Figure	NF	I_C=0.2mA R_S=2.0kΩ BW=200Hz	V_{CE}=5.0V f=1.0kHz			10	dB

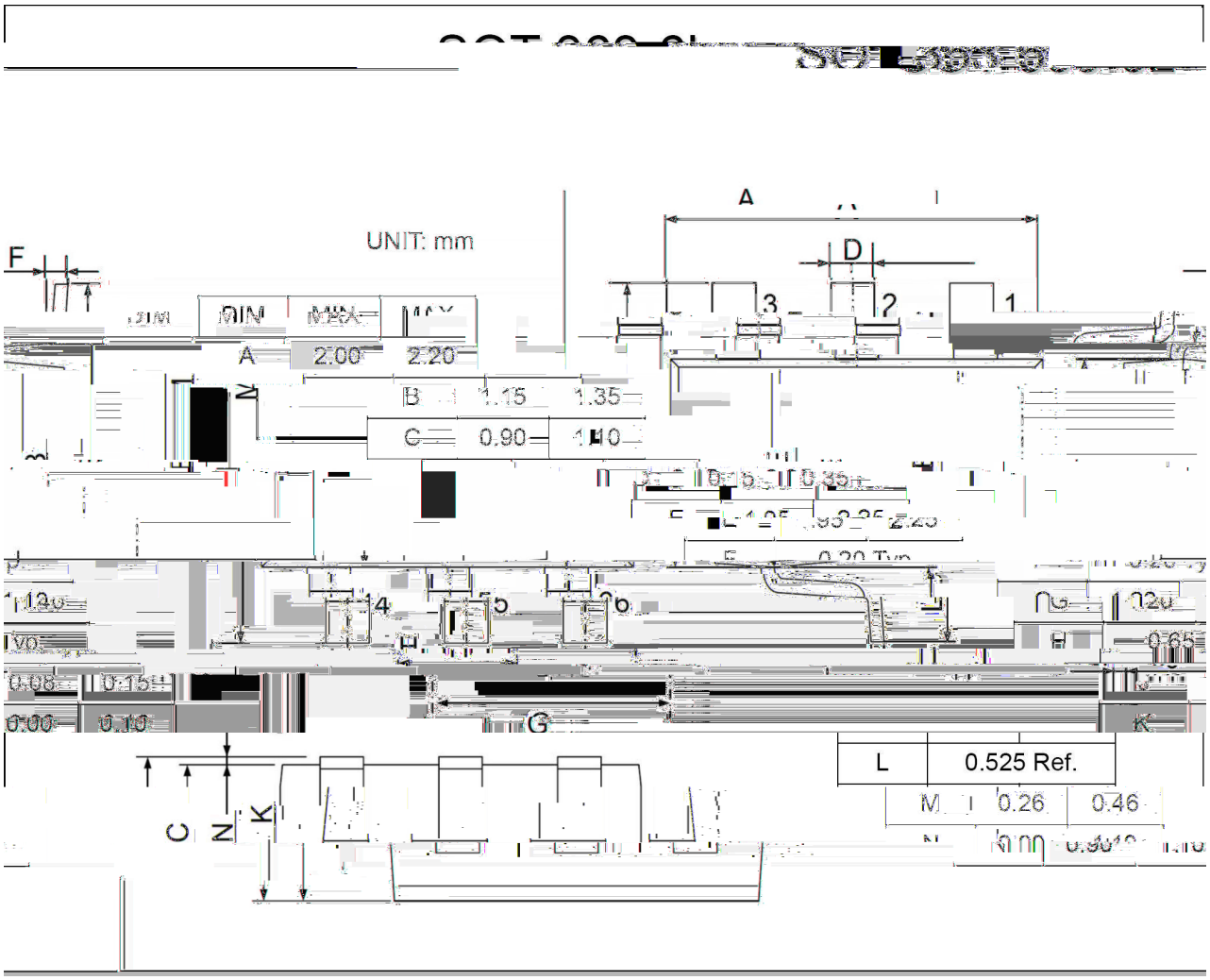
/ Electrical Characteristic Curve



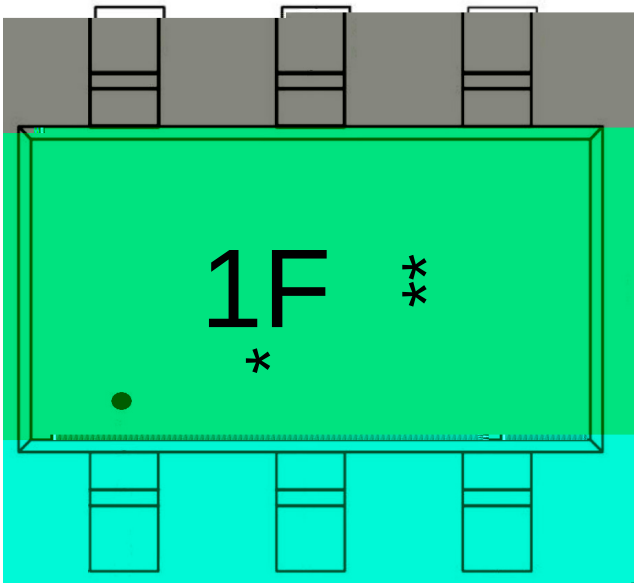




/ Package Dimensions



/ Marking Instructions

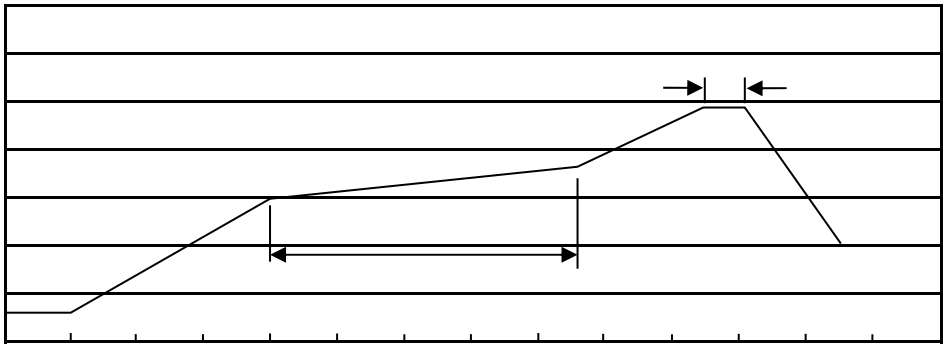


●	“ 1 ”
1	
F	h_{FE}
***	

Note:

●	“ 1 ” Pin
1	Product Type Code
F	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 , 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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm³)
SOT-363	3,000	10	30,000	6	180,000	7″ ×8	180×120×180	390×385×205

/ Notices