/ Descriptions

Silicon NPN transistor in a TO-92 Plastic Package.

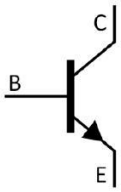
/ Features

High transition frequency, low saturation voltage, high speed switching time.

/ Applications

Ultra high speed switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

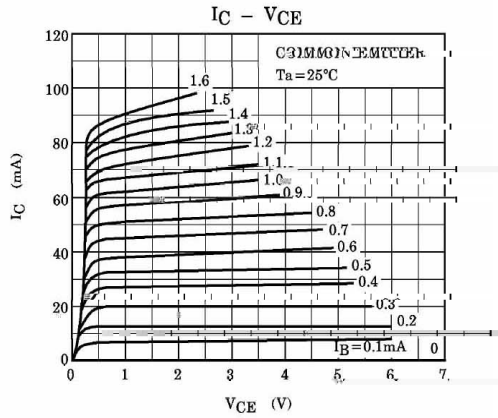
h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	40~80	70~140	120~240

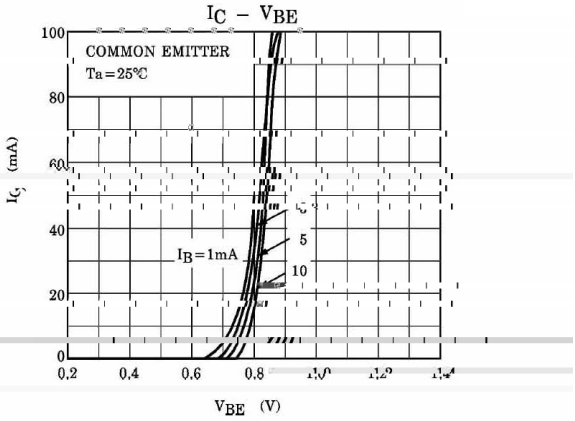
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	15	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	200	mA
Base Current – Continuous	I_B	40	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

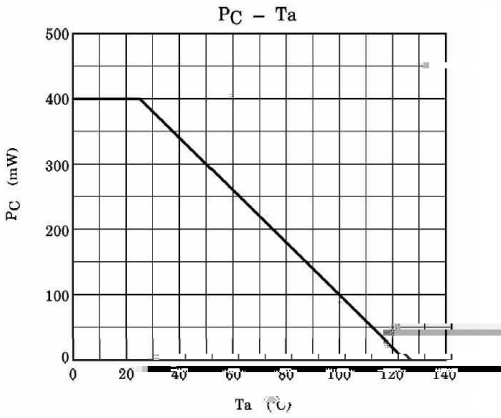
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=40V I_E=0			0.1	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.1	A
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V I_C=10mA	40		240	
	$h_{FE(2)}$	V_{CE}=1.0V I_C=100mA	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=20mA I_B=1.0mA			0.3	V

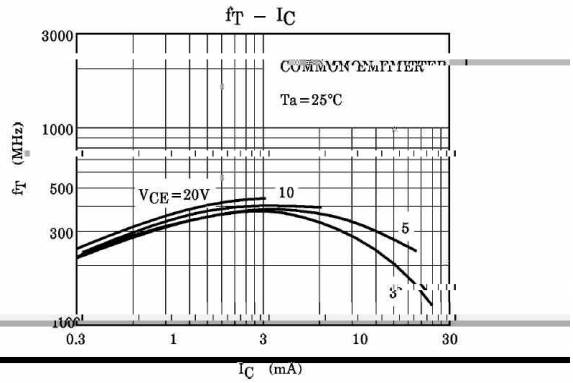
Baseda409.34 0.48F9tSa

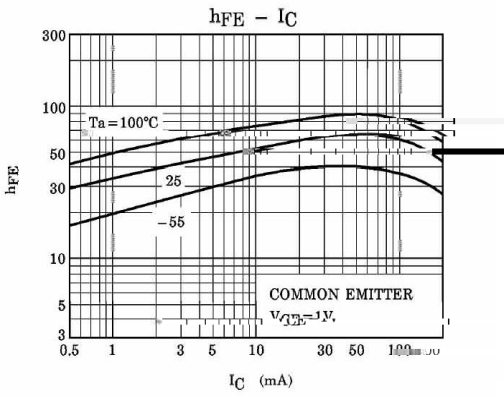
/ Electrical Characteristic Curve

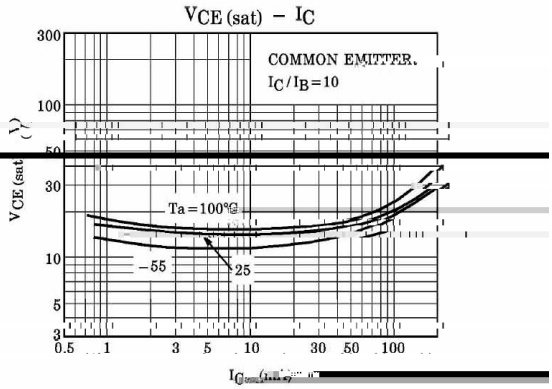




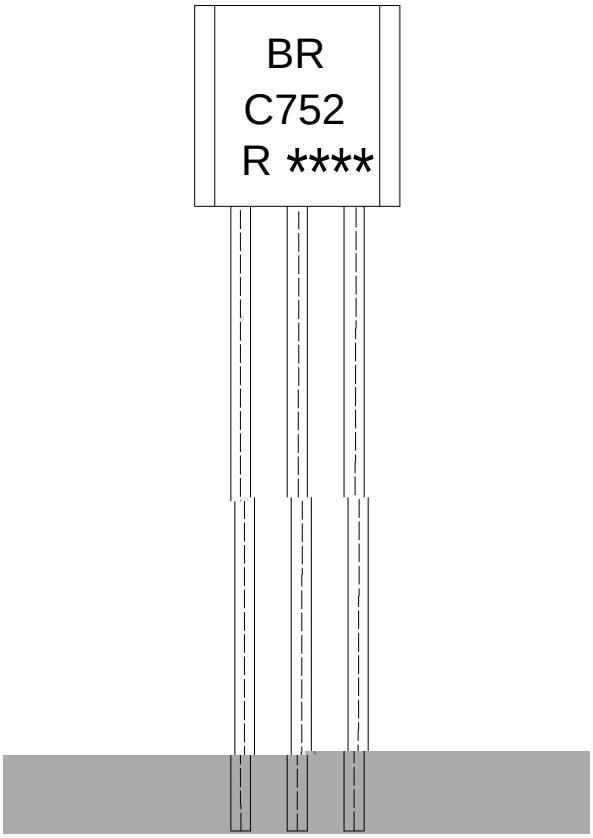








/ Marking Instructions

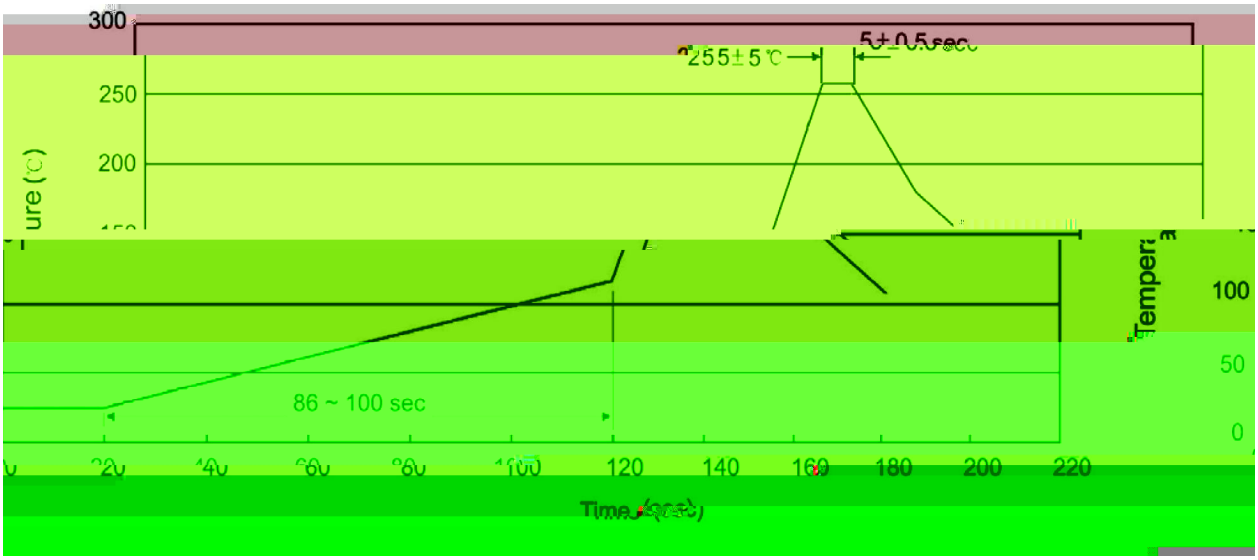


h_{FE}

Note:

BR:	Company Code.
C752:	Product Type.
R:	h_{FE} Classifications Symbol
****:	Lot No. Code,code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



1	25	150	60	90sec;	
2	255	5	5	0.5sec;	
3		2	10	/sec.	

Note:
1.Preheating:25~150 , Time:60~90sec.
2.Peak Temp.:255 5 , Duration:5 0.5sec.
3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235，大箱 547×407×268

/ Notices