/ Descriptions

TO-92(R) NPN Silicon NPN transistor in a TO-92(R) Plastic Package.

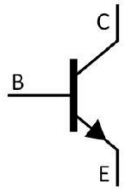
/ Features

High Voltage, Low Noise.

/ Applications

General purpose and switching application.

/ Equivalent Circuit



/ Pinning

PIN1 Emitter PIN 2 Base PIN 3 Collector

/ h_{FE} Classifications & Marking

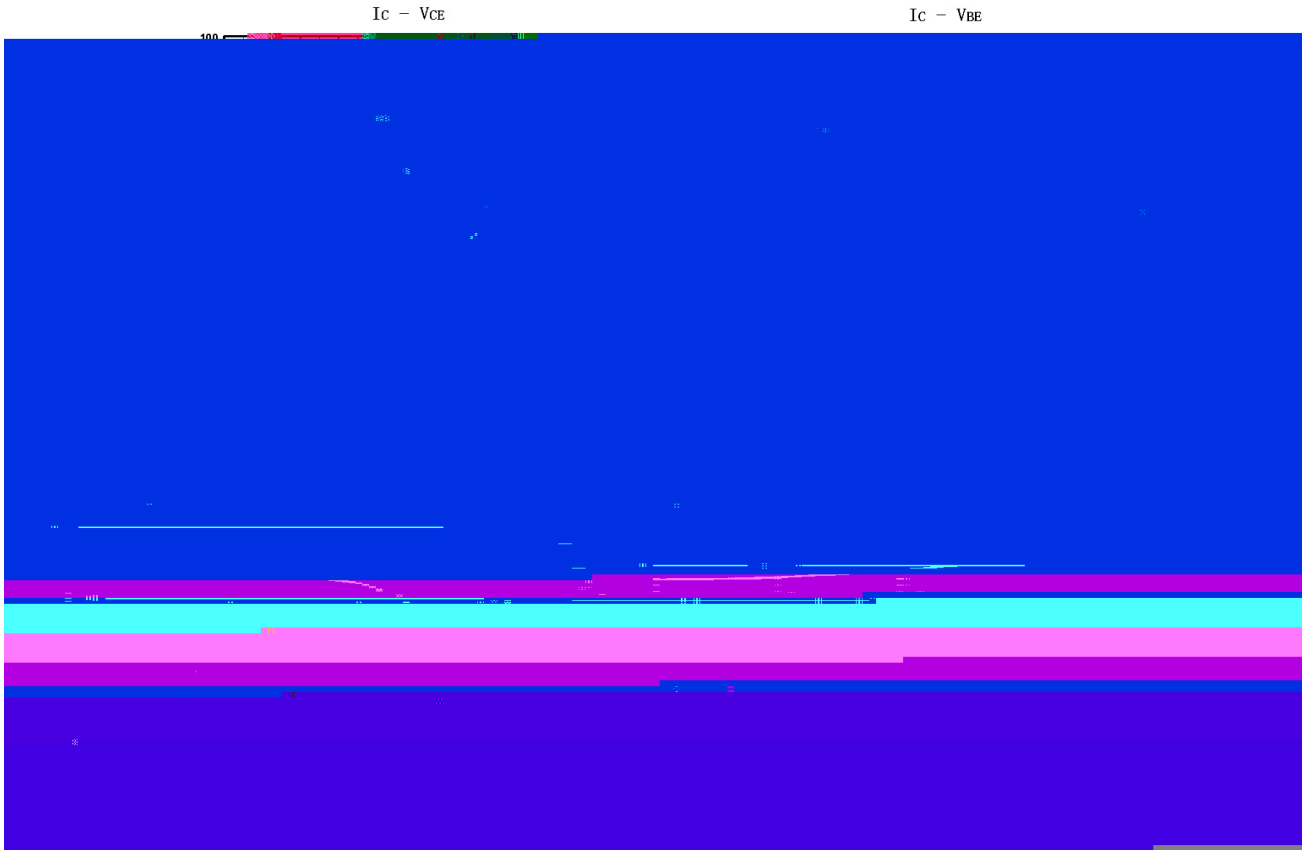
h_{FE} Classifications Symbol	A	B	C
h_{FE} Range			

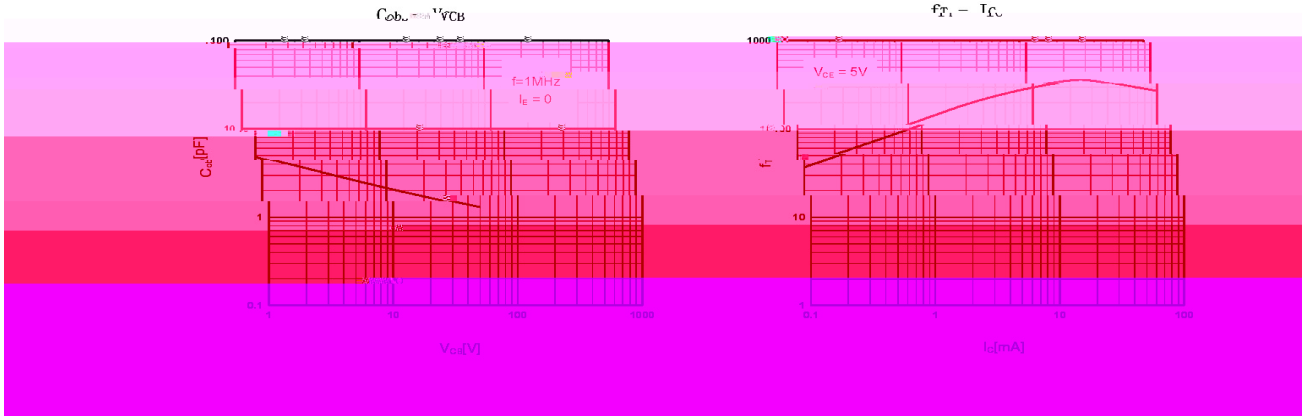
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	100	mA
Emitter Current - Continuous	I_E	-100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

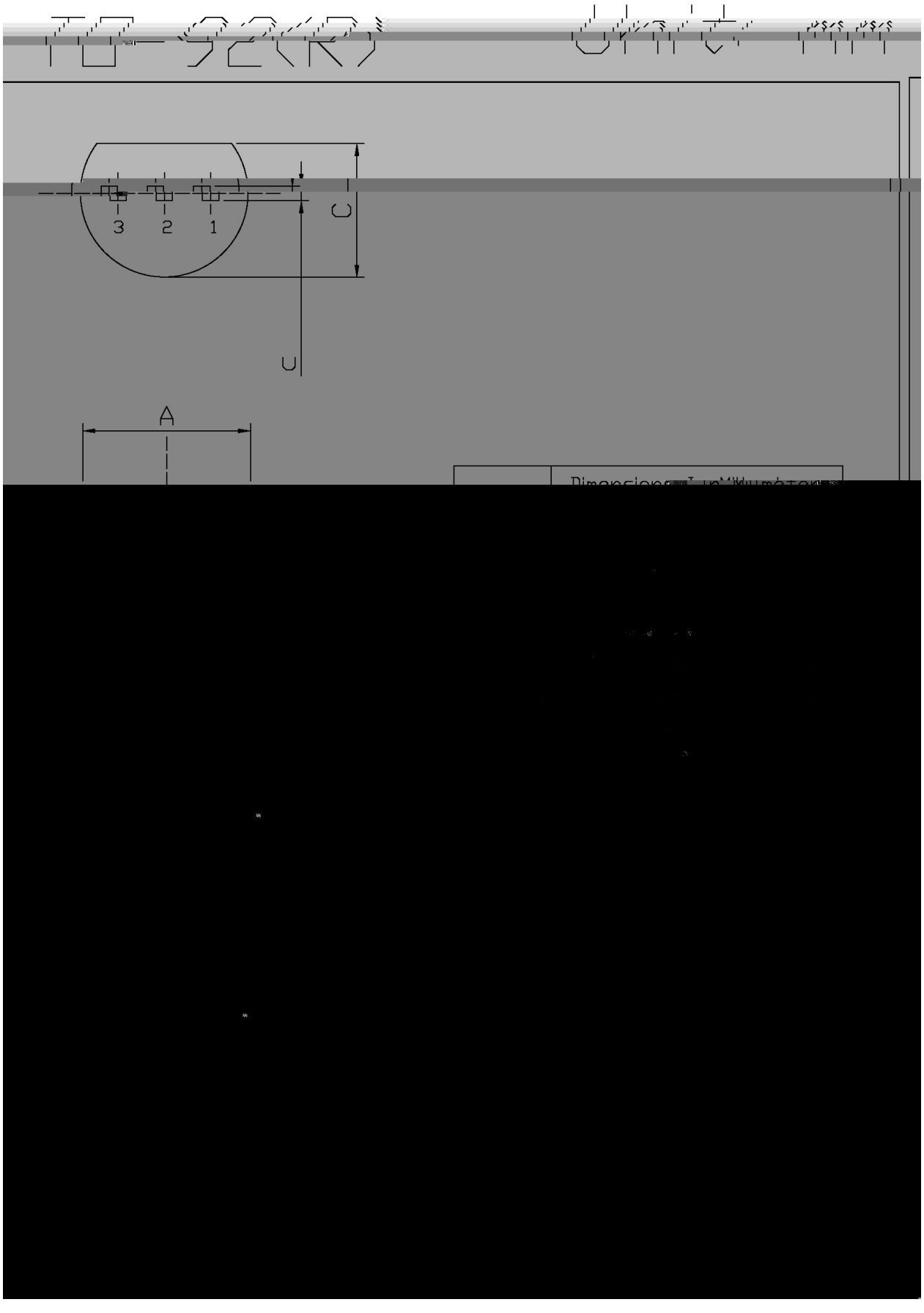
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=30V I_E=0			0.015	μA
DC Current Gain	h_{FE}	V_{CE}=5.0V I_C=2.0mA	110		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=5.0mA			0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA I_B=5.0mA		0.9	1.1	V
Base-Emitter Voltage	$V_{BE(1)}$	V_{CE}=5.0V I_C=2.0mA	0.58		0.7	V
	$V_{BE(2)}$	V_{CE}=5.0V I_C=10mA			0.75	V

/ Electrical Characteristic Curve

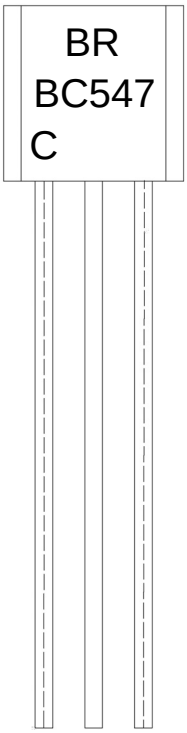




/ Package Dimensions



/ Marking Instructions



BR

BC547

C h_{FE}

****

Note:

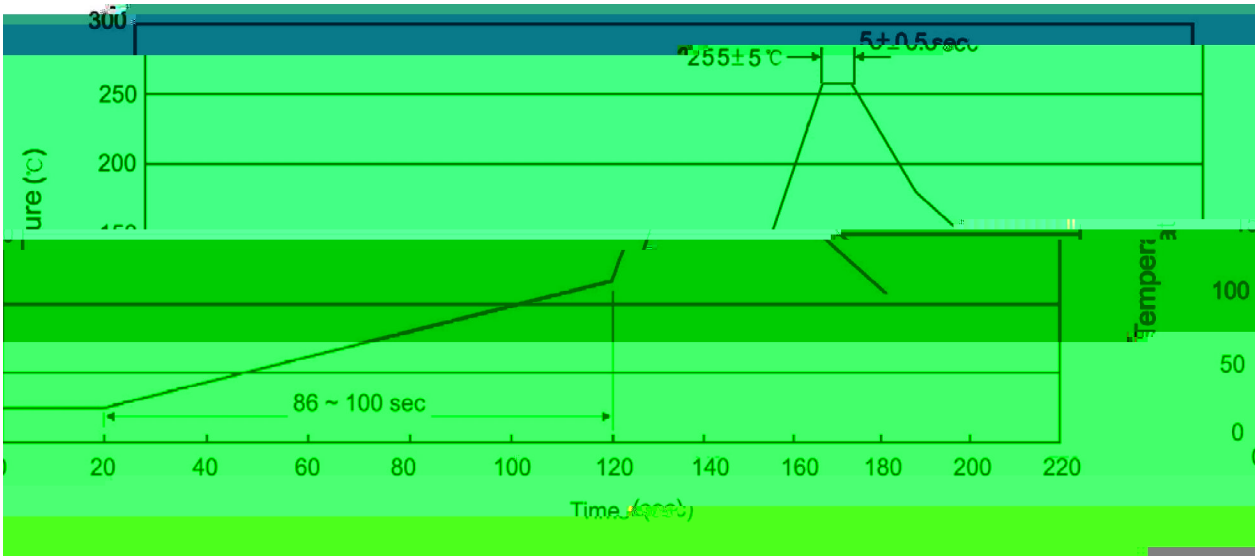
BR: Company Code.

BC547: Product Type.

C h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

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



					Note:
1	25	150	60	90sec;	1.Preheating:25~150 , Time:60~90sec.
2	255±5			5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3		2	10	/sec.	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	Units					Dimension		(unit mm3)

/ AMMO

Package Type	Units					Dimension	(unit mm3)

/ Notices