TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

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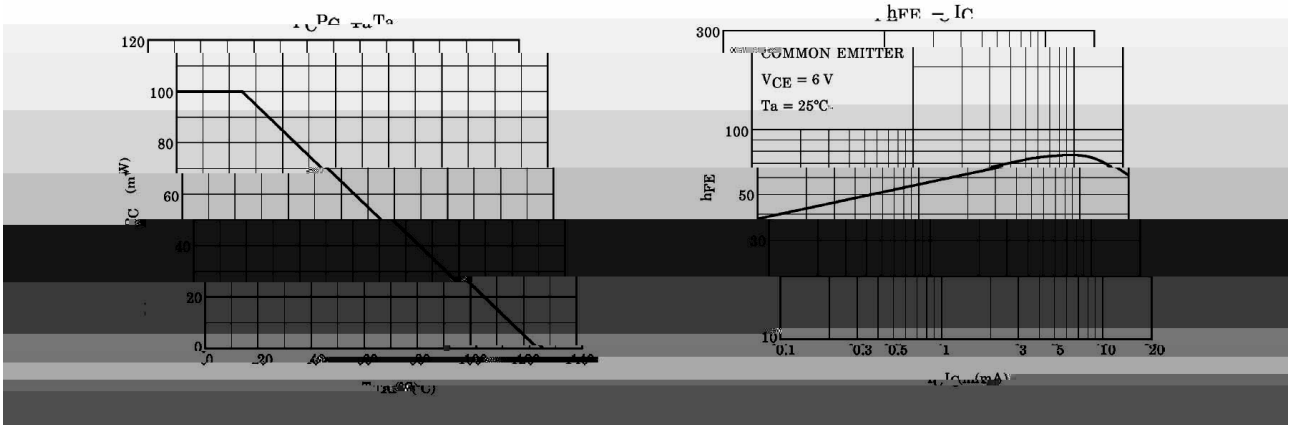
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current - Continuous	I_C	20	mA
Emitter Current - Continuous	I_E	-20	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

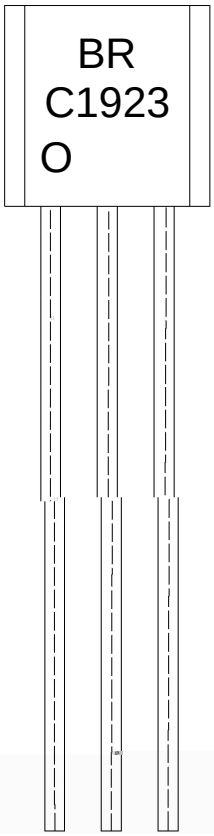
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=18V I_E=0			0.5	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0			0.5	μA
DC Current Gain	h_{FE}	V_{CE}=6.0V I_C=1.0mA	40		200	
Transition Frequency	f_T	V_{CE}=6.0V I_C=1.0mA		550		MHz
Power Gain	G_{pe}	V_{CE}=6.0V I_E=-1.0mA f=100MHz	15	18		dB
Noise Figure	NF	V_{CE}=6.0V I_E=-1.0mA f=100MHz		2.5	5.0	dB
Collector- Base Time Constant	C_C.rbb	V_{CE}=6.0V I_E=-1.0mA f=30MHz			30	ps
Common Emitter Reverse Transfer Capacitance	C_{re}	V_{CE}=6.0V f=1.0MHz		0.7		pF

/ Electrical Characteristic Curve



/ Package Dimensions

/ Marking Instructions



BR:

C1923

O: h_{FE}

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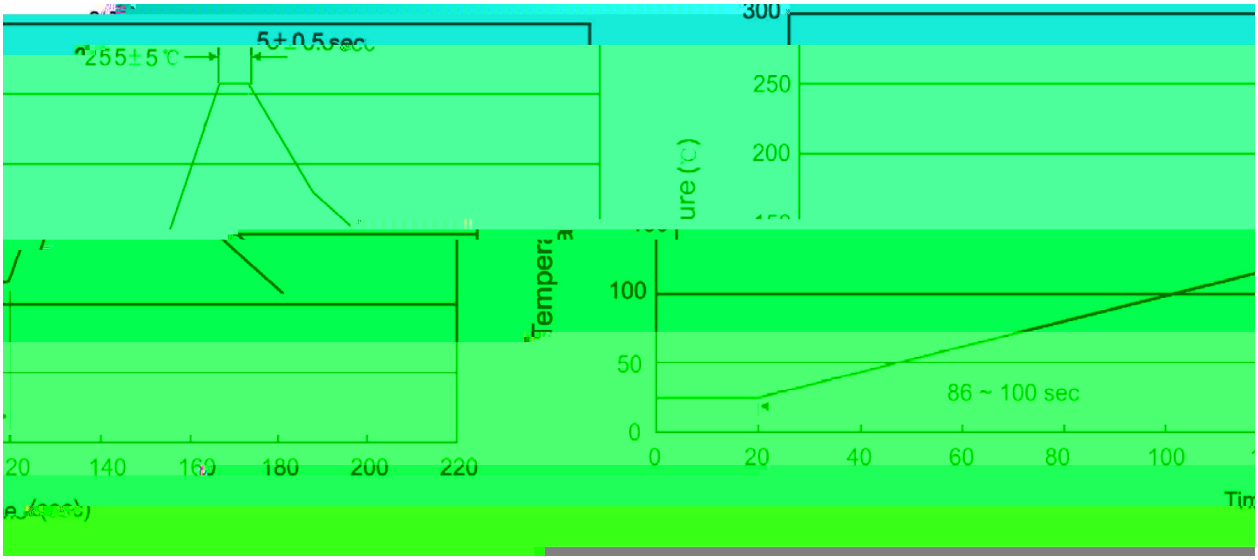
Note:

BR:	Company Code.
C1923:	Product Type.
O:	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

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