/ Descriptions

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

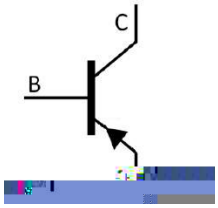
/ Features

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	125 250	220 475	420 800

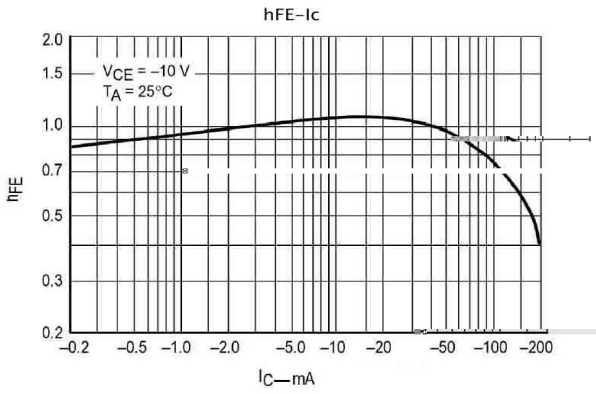
/ Absolute Maximum Ratings(Ta=25)

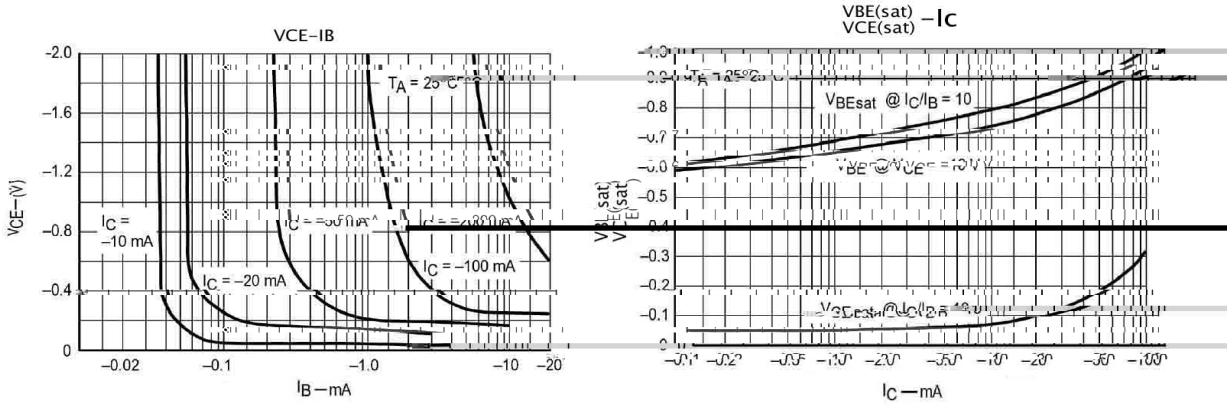
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Emitter Current - Continuous	I_E	100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

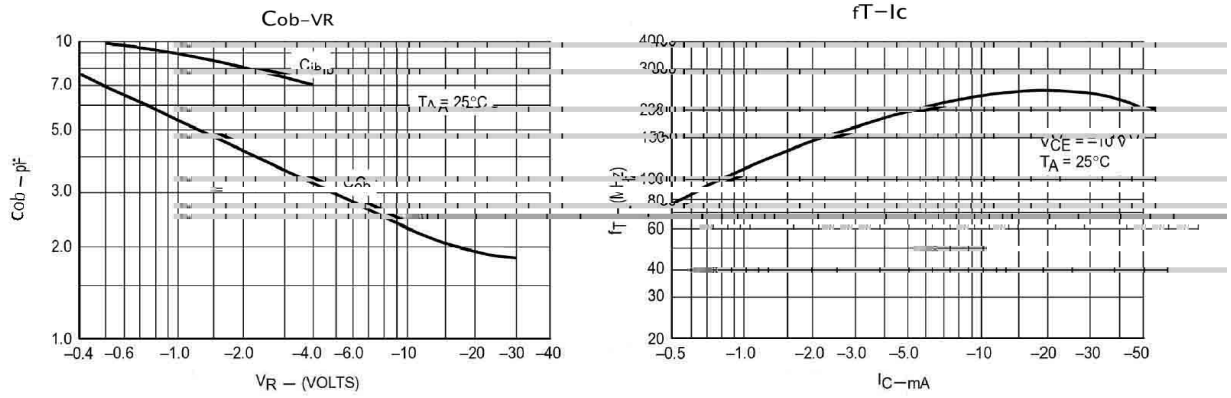
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.015	A
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-2.0mA	125		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-100mA I_B=-5.0mA			-0.65	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	-0.6		-0.75	V
	$V_{BE(2)}$	V_{CE}=-5.0V I_C=-10mA			-0.8	V
Current Gain Bandwidth Product	f_T	V_{CE}=-5.0V I_C=-10mA f=100MHz		150		MHz
Transition Frequency	C_{ob}	V_{CB}=-10V f=1.0MHz		4.5		pF
Noise Figure	NF	V_{CE}=-6.0V I_C=-0.1mA R_g=10K f=1.0KHz		1.0	10	dB

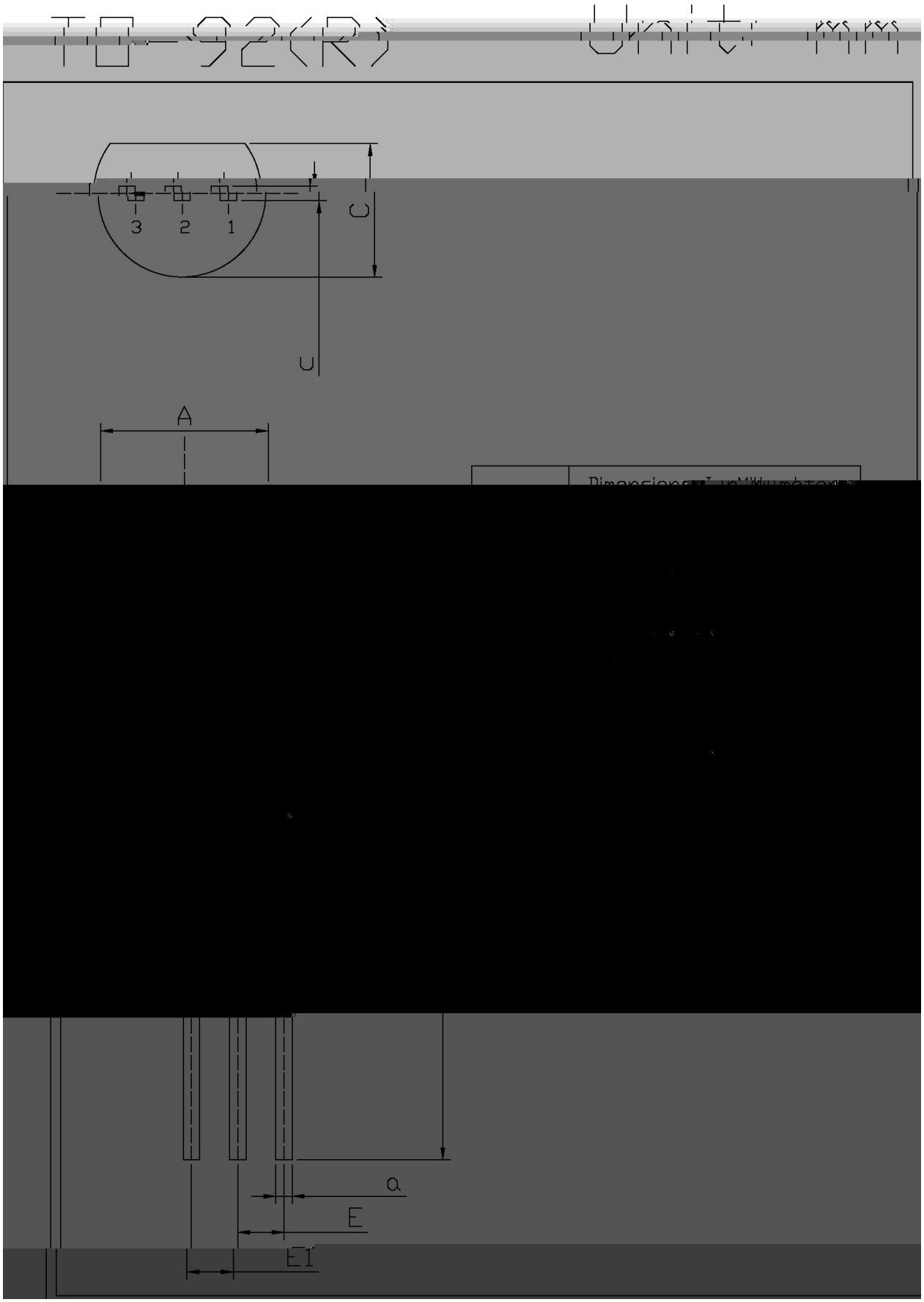
/ Electrical Characteristic Curve

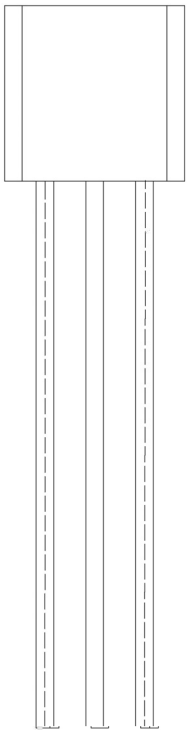




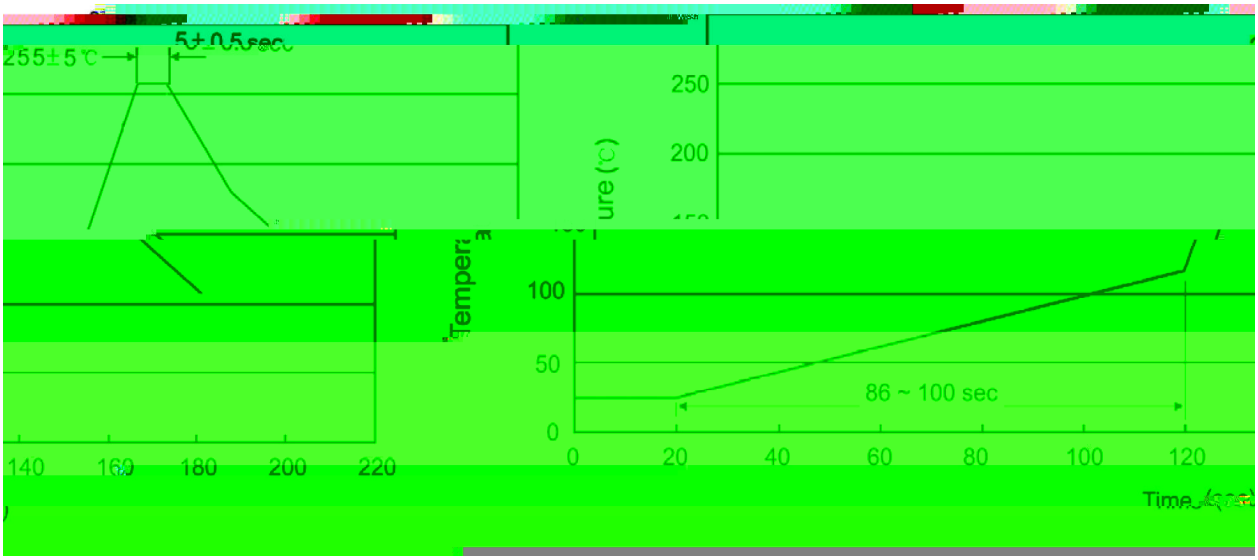


/ Package Dimensions





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



Note:

1 25 150 60 90sec;

2 255±5 5±0.5sec;

3 2 10 /sec.

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	Units					Dimension		(unit mm3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
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	Units					Dimension	(unit mm3)
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235 547×407×268

/ Notices