/ Descriptions

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

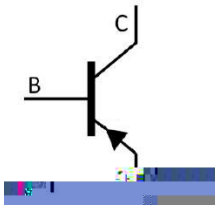
/ Features

Low current, Low voltage. HF Product.

/ Applications

General purpose amplifier.

/ Equivalent Circuit





PIN1 Collector PIN 2 Base PIN 3 Emitter

/ h_{FE} Classifications & Marking

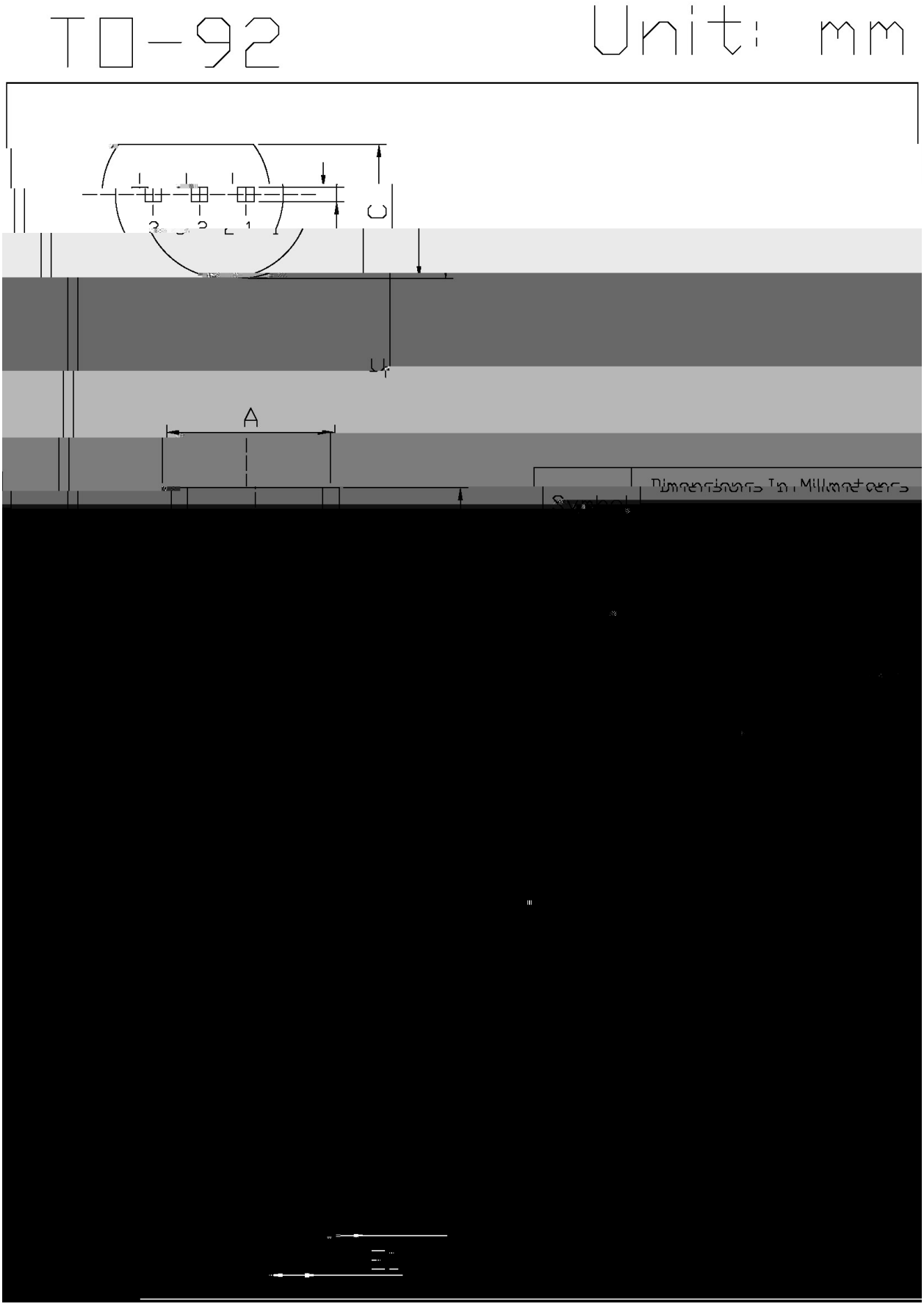
See Marking Instructions.

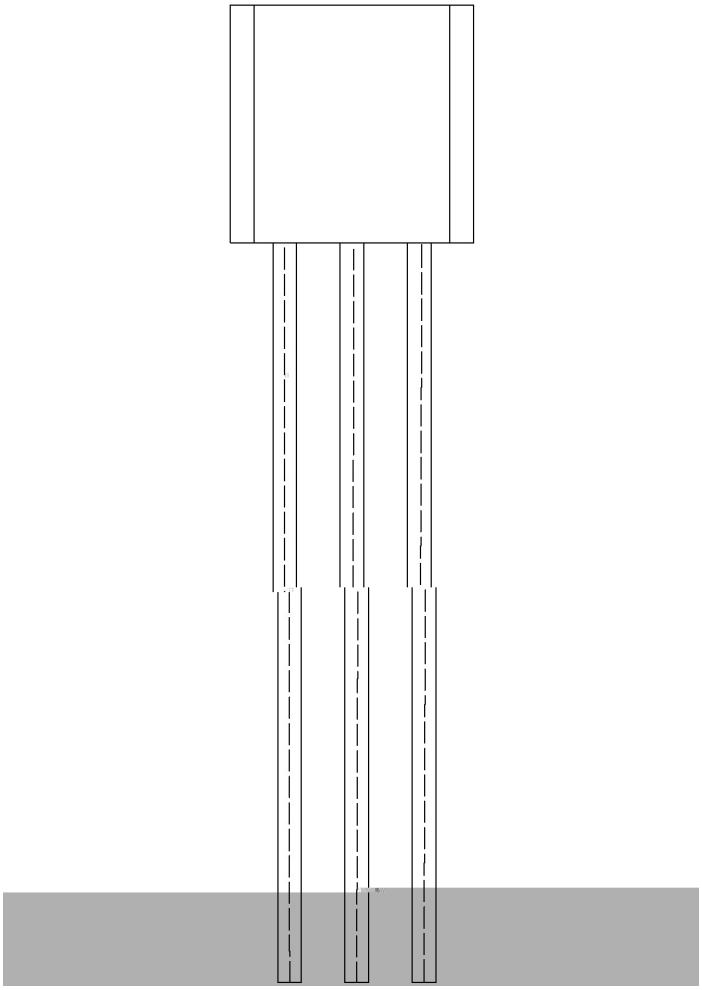
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-40	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-10μA I_E=0	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-40			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-40V I_E=0			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-5.0V I_C=0			-0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-10mA	100		300	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-100mA	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-50mA I_B=-5.0mA			-0.4	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-50mA I_B=-5.0mA			-0.95	V
Current Gain Bandwidth Product	f_T	I_C=-10mA V_{CE}=-20V f=100MHz	250			MHz
Output Capacitance	C_{ob}	V_{CB}=-5.0V I_E=0 f=100KHz			4.5	pF
Turn On Time	T_{on}	V_{CC}=-3.0V I_C=-10mA V_{BE}=-0.5V I_{B1}=-1.0mA			0.07	μs
Turn Off Time	T_{off}	V_{CC}=-3.0V I				

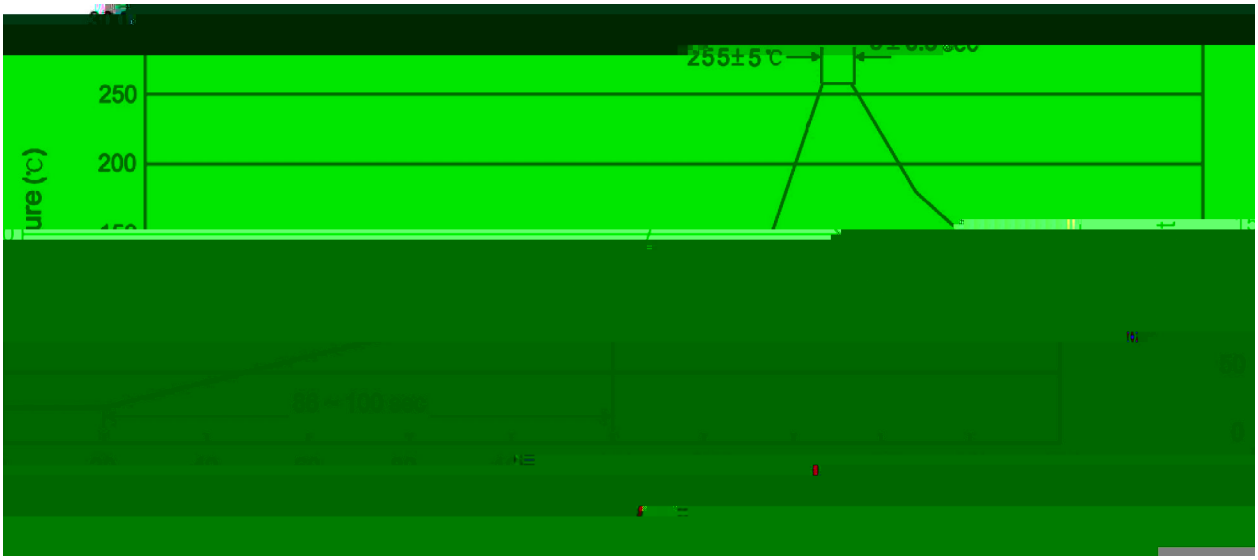
/ Electrical Characteristic Curve

/ Package Dimensions





( ) / 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)