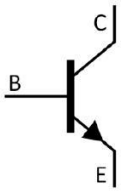
TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

Low current, Low voltage, HF Product.

General purpose amplifier.



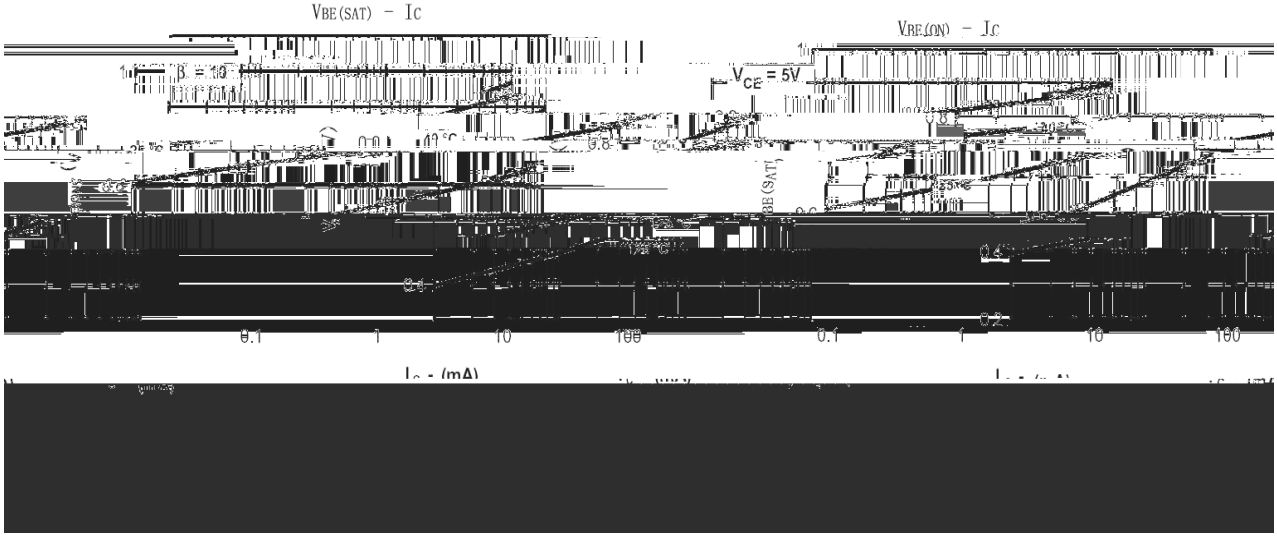
PIN1 Collector PIN 2 Base PIN 3 Emitter

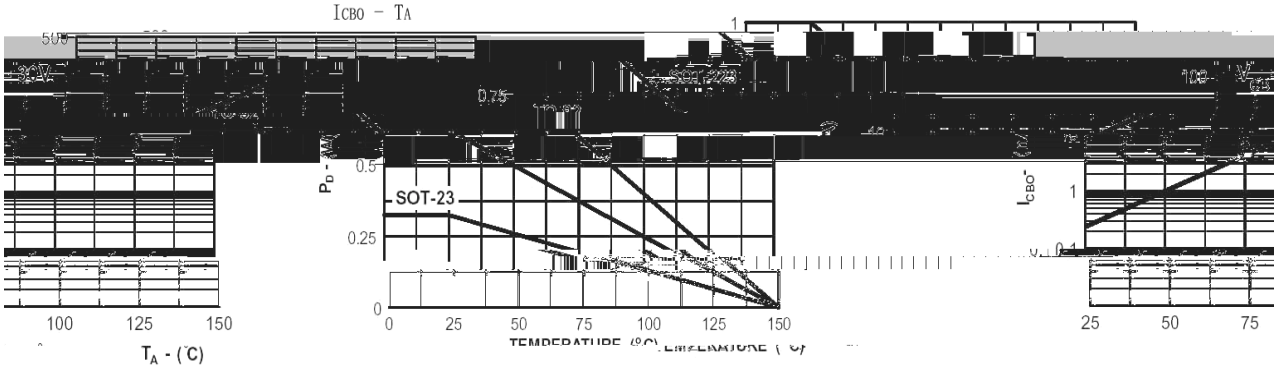
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	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	

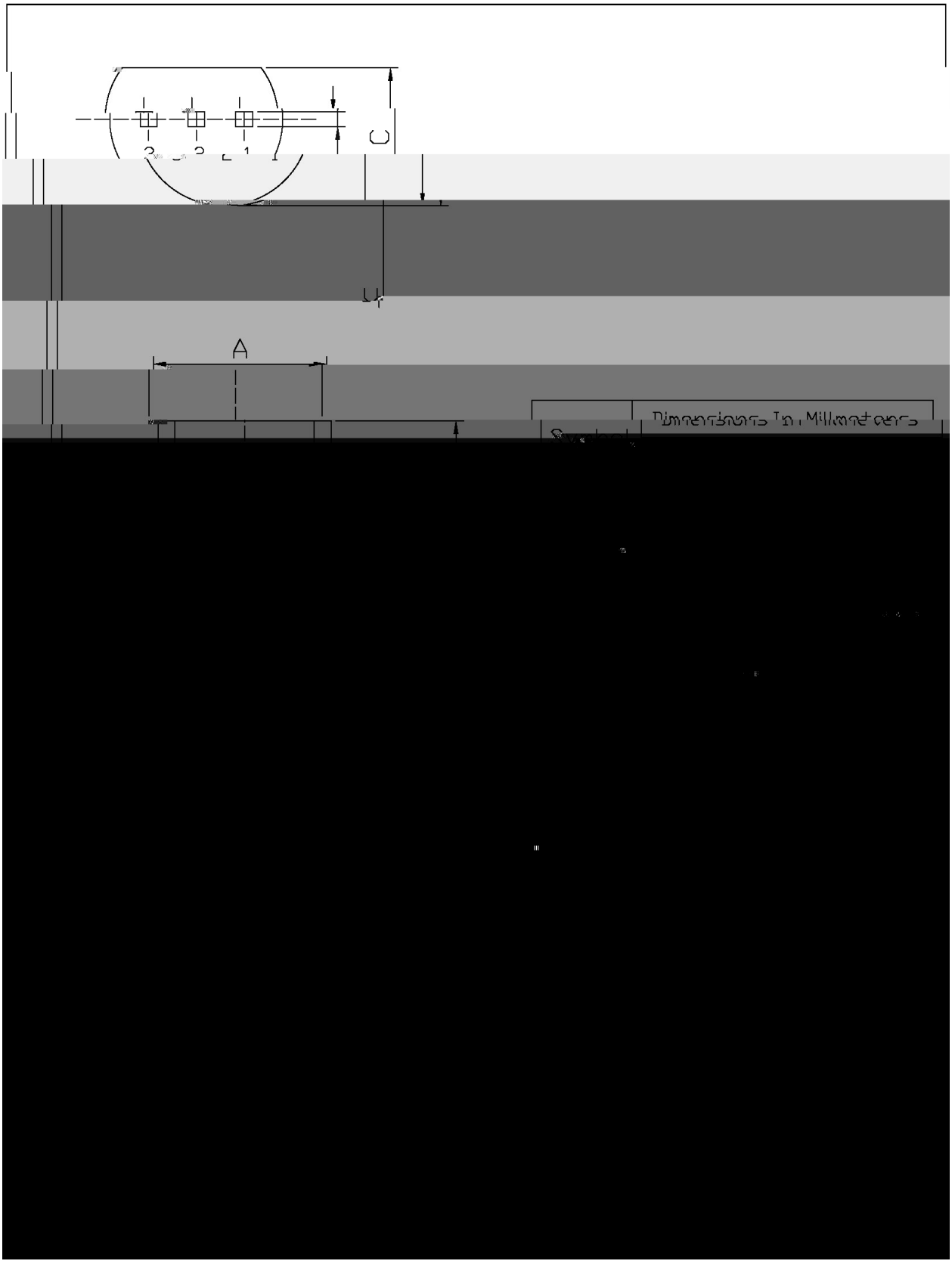
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=10 A I_E=0	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	40			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=10 A I_C=0	6.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=50V I_E=0			0.05	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.05	A
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			0.3	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	300			MHz
Output Capacitance	C_{ob}	V_{CB}=5.0V I_E=0 f=1.0MHz			4.0	pF
Turn On Time	T_{on}	V_{CC}=3.0V V_{BE}=0.5V I_C=10mA I_{B1}=1.0mA			0.07	s
Turn Off Time	T_{off}	V_{CC}=3.0V I_C=10mA I_{B1}=-I_{B2}=1.0mA			0.25	s

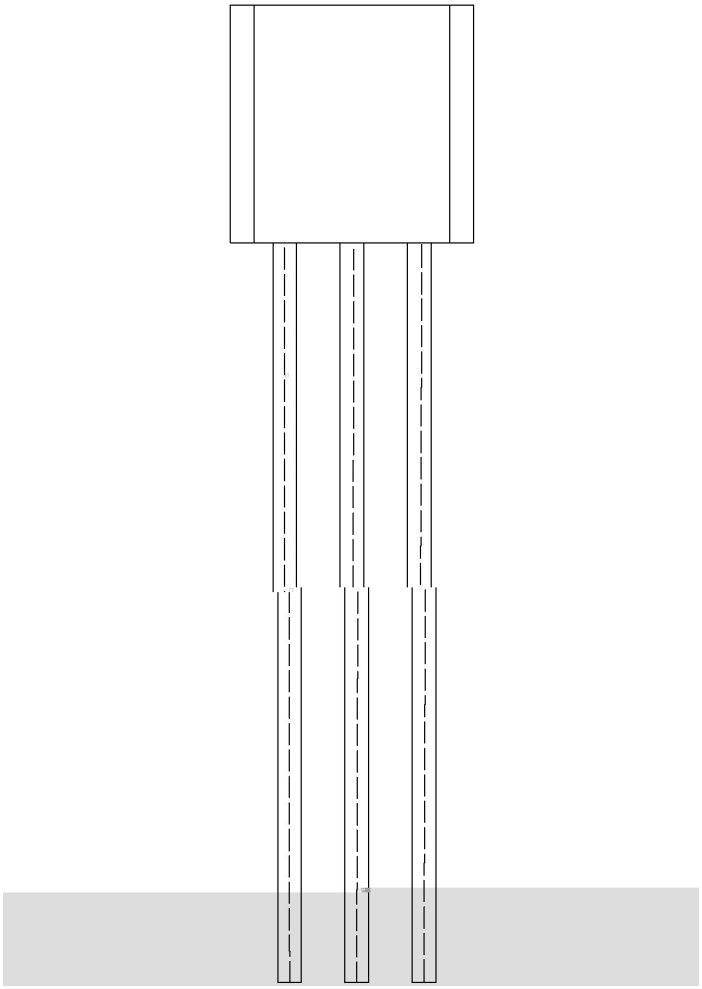

VCESAT - IC
VCE=5V
25°C


VBE(SAT) - IC
VBE(ON) - IC
VCE = 5V
β = 10
25°C
0.1
1
10
100


ICBO - TA
SOT-23
PD -
ICBO
TA - (°C)
TEMPERATURE (°C)
0
0.25
0.5
0.75
1
25
50
75
100
125
150

TO-92 Unit: mm





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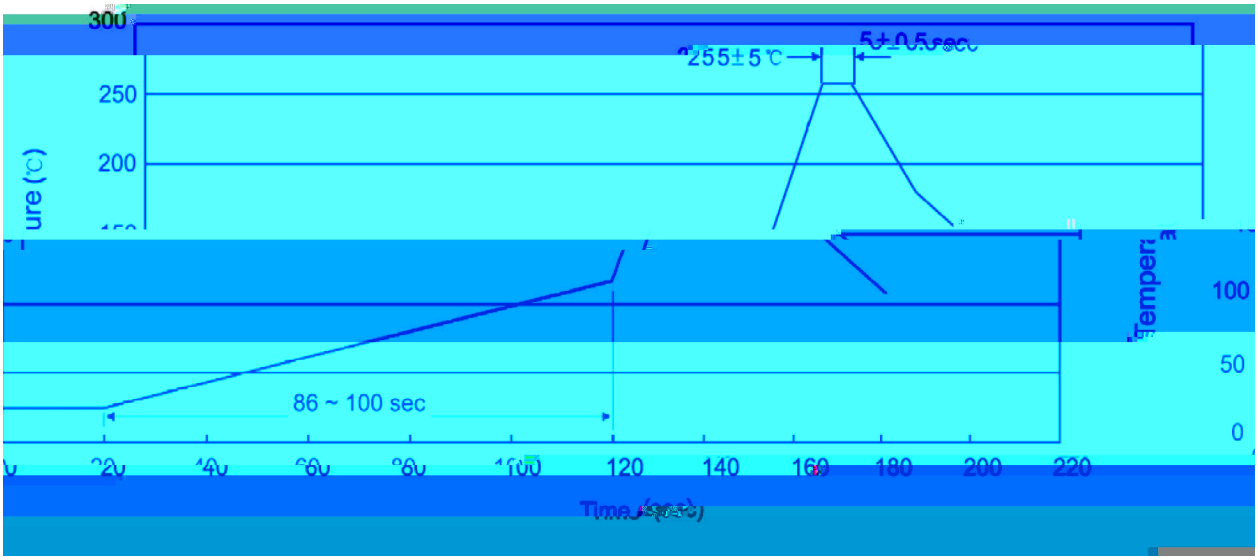

	Note:
1 25 150 60 90sec;	1.Preheating:25~150 , Time:60~90sec.
2 255±5 5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3 2 10 /sec.	3. Cooling Speed: 2~10 /sec.

270±5 10±1 sec. Tf0.56Db2f孚j/TT2 1 Tf2 0 TD-0.0005;