/ Descriptions

Silicon NPN transistor in a TO-92 Plastic Package.

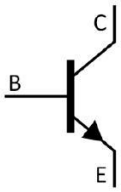
/ Features

Complementary pair with KSA733.

/ Applications

Audio frequency amplifier, high frequency OSC.

/ Equivalent Circuit



/ Pinning



PIN1 Collector PIN 2 Base PIN 3 Emitter

/ hFE Classifications & Marking

h_{FE} Classifications Symbol	O	Y	G	L
h_{FE} Range	70~140	120~240	200~400	350~700

/ Absolute Maximum Ratings(Ta=25)

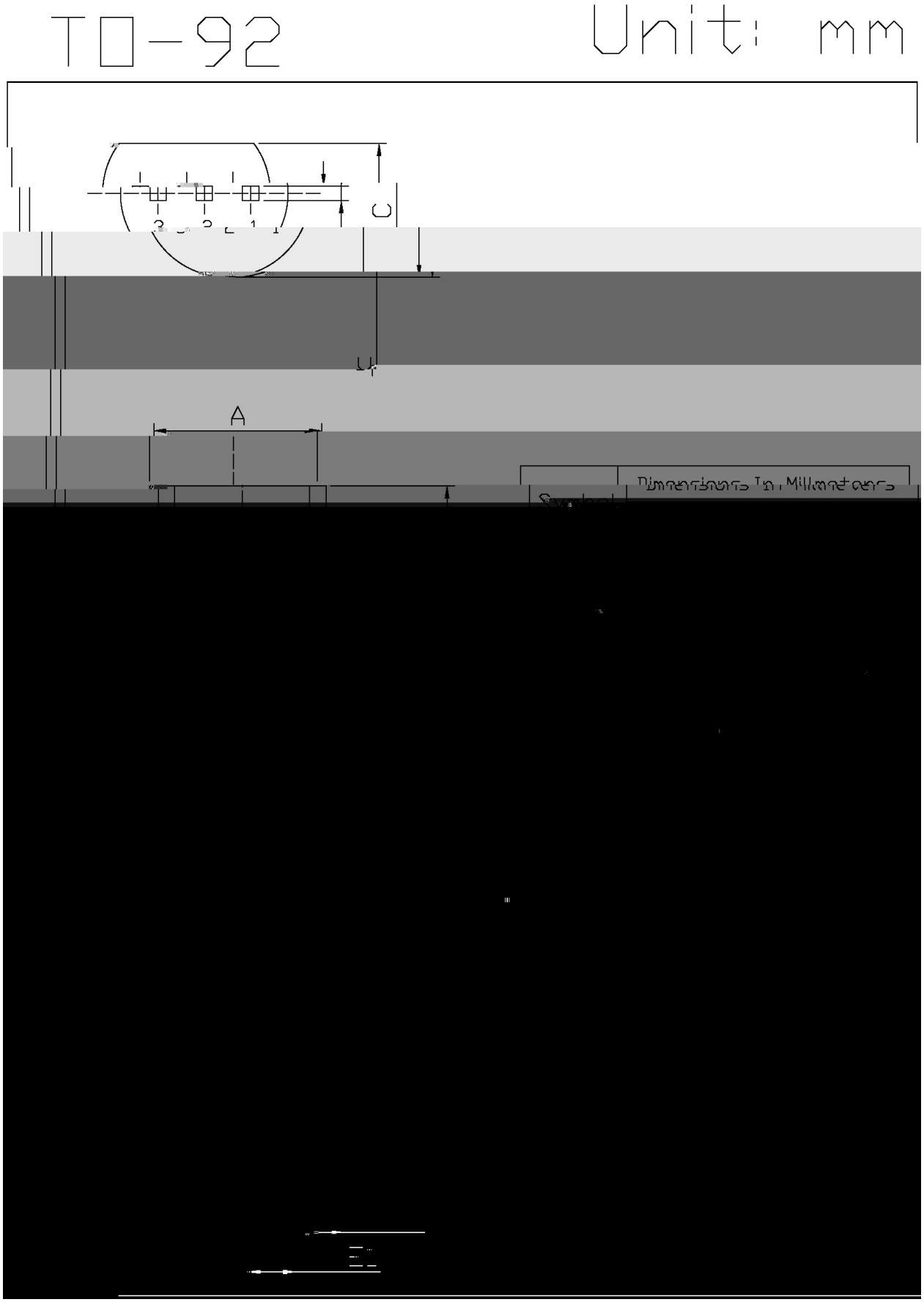
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	150	mA
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

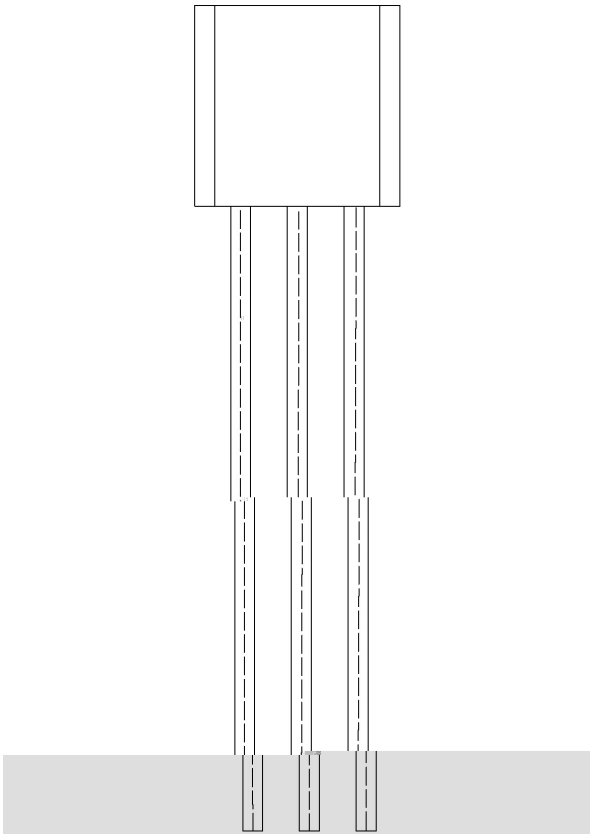
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=100μA I_E=0	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=10mA I_B=0	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10μA I_C=0	5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=40V I_E=0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=3.0V I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=6.0V I_C=1.0mA	70		700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=10mA		0.15	0.3	V
Transition Frequency	f_T	V_{CE}=6.0V I_C=10mA		300		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=6.0V I_E=0 f=1.0MHz		2.5		pF
Noise Figure	NF	V_{CE}=6.0V I_E=-0.5mA f=1.0KHz R_S=500Ω		4.0		dB

/ Electrical Characteristic Curve

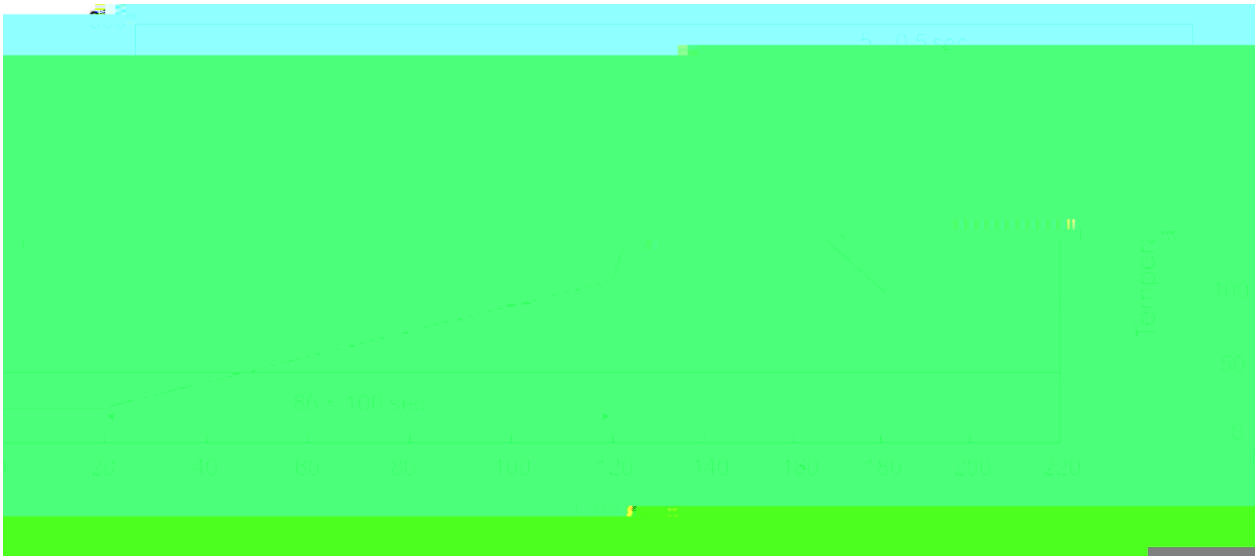
/ Package Dimensions



/ Marking Instructions



( ) / 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)