

/ Descriptions

Silicon NPN transistor in a TO-92 Plastic Package.

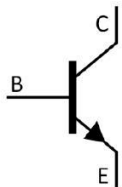
/ Features

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

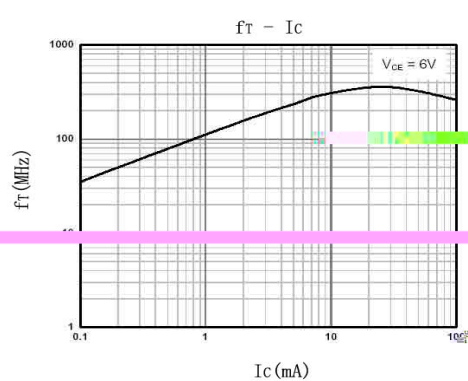
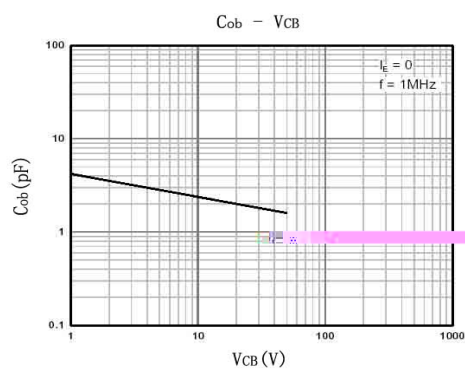
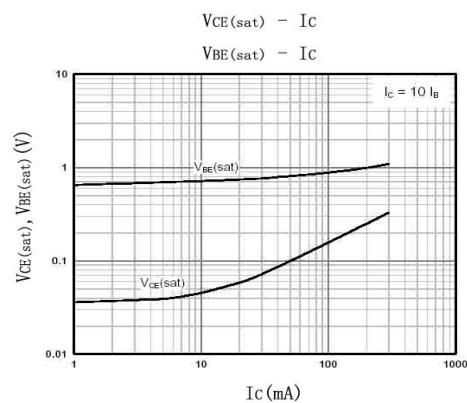
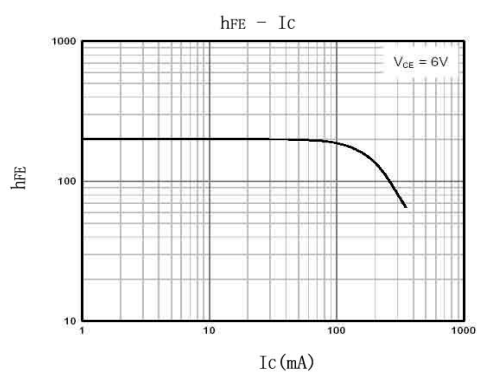
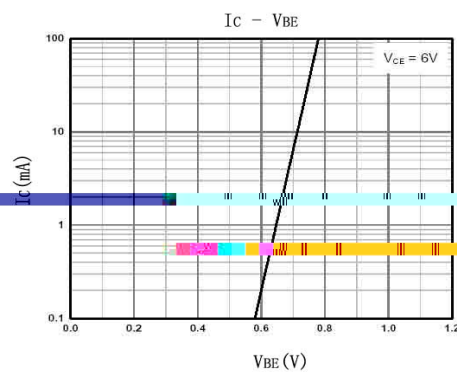
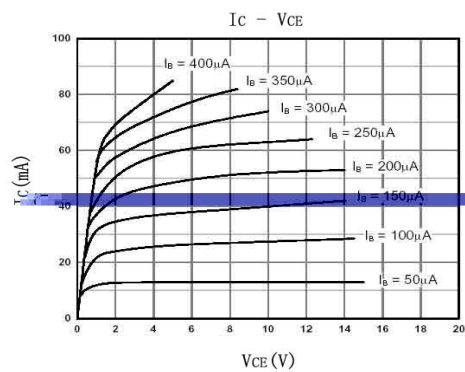
/ Absolute Maximum Ratings(Ta=25)

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}	$I_C=100\mu A$ $I_E=0$	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-10\mu A$ $I_C=0$	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	$V_{CE}=6.0V$ $I_E=-0.5mA$ $f=1.0KHz$ $R_S=500\Omega$		4.0		dB

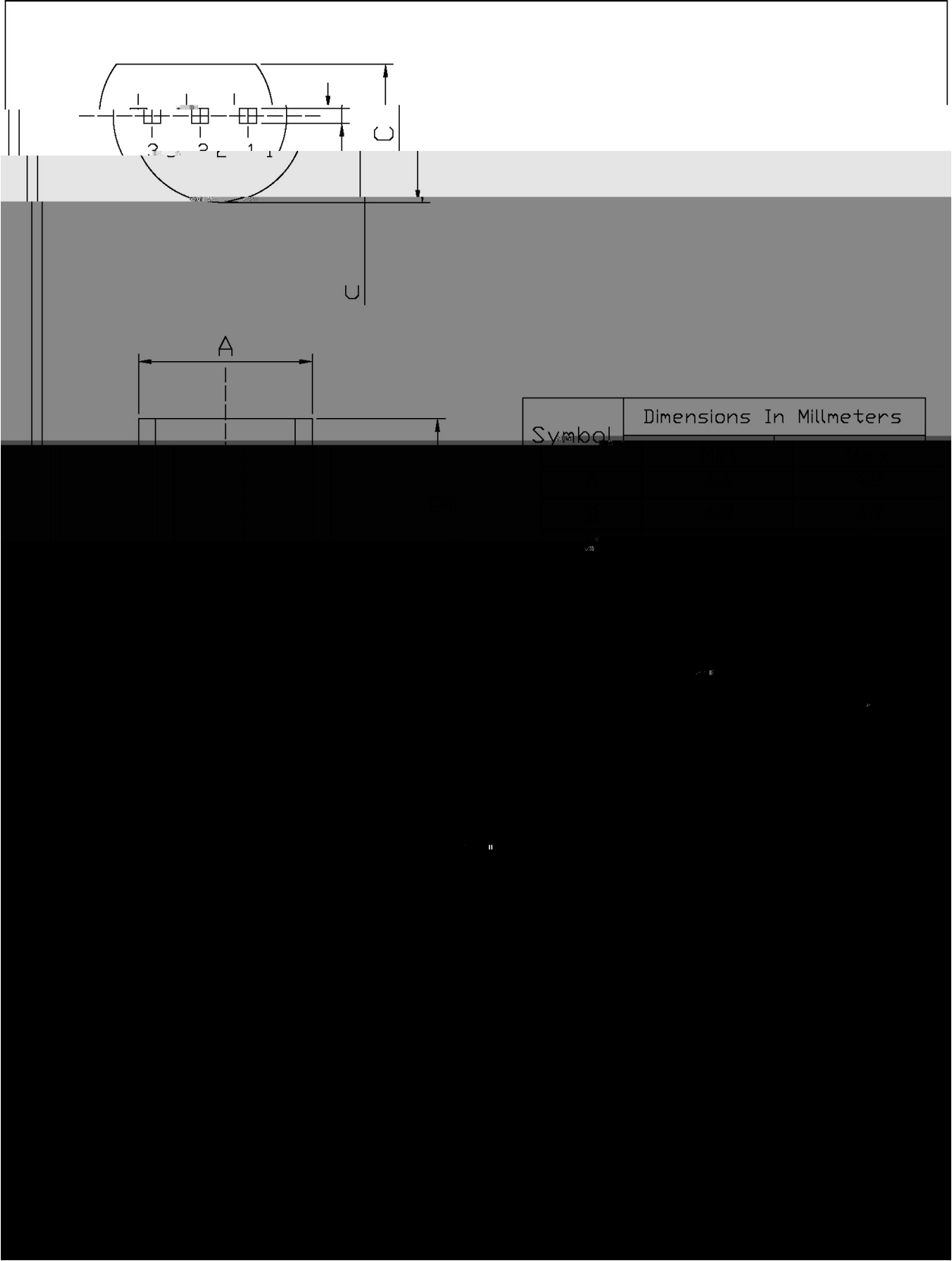
/ Electrical Characteristic Curve



/ Package Dimensions

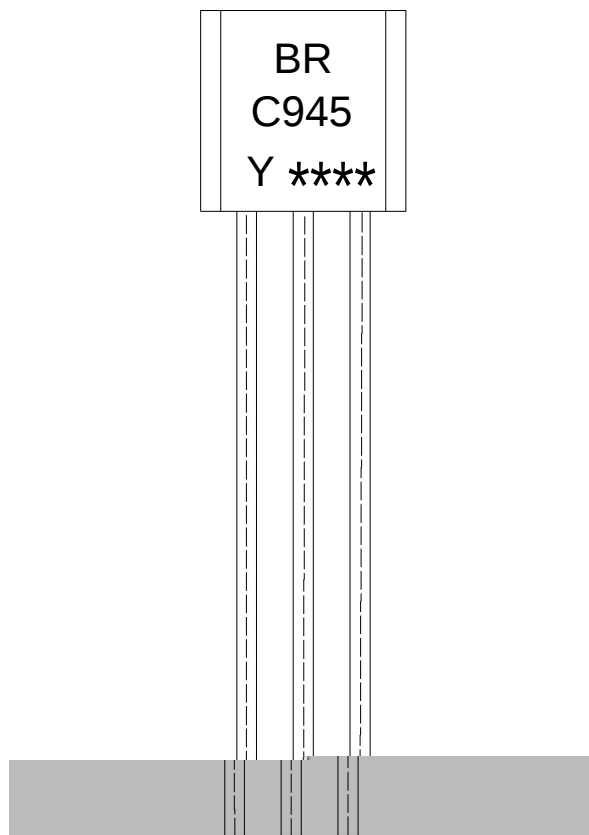
T0-92

Unit: mm



Symbol	Dimensions In Millimeters
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/ Marking Instructions



Note:

BR: Company Code.

C945: Product Type.

Y: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

