/ Descriptions

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

/ Features

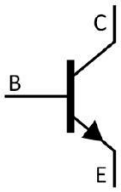
P_C I_C h_{FE} 3CG9012

High P_C and I_C, excellent h_{FE} linearity, complementary pair with3DG 9012.

/ Applications

Amplifier of portable radios in class B push-pull operation.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

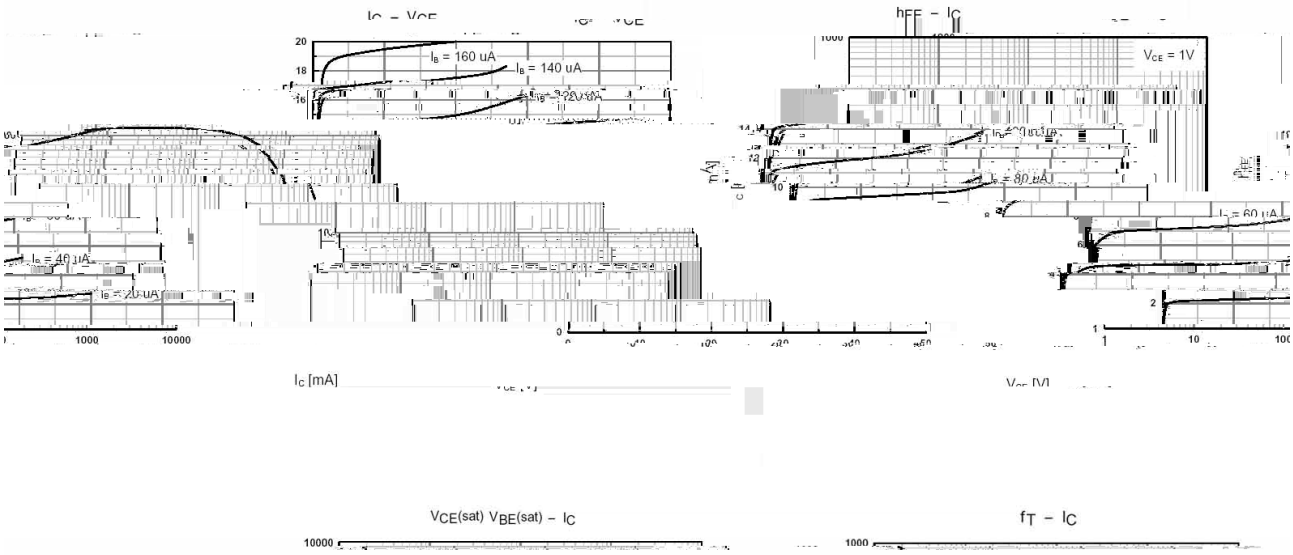
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	D	E	F	G	H	I
h_{FE} Range	64~91	78~112	96~135	112~166	144~202	188~276

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	500	mA
Base Current - Continuous	I_B	100	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=0.1mA I_E=0	40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	20			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=0.1mA I_C=0	5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=25V 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	$h_{FE(1)}$	$V_=$ 3 . 0 V 0 T D 5 T m 6 4 0 . 4 7 9 9 8 - 5				

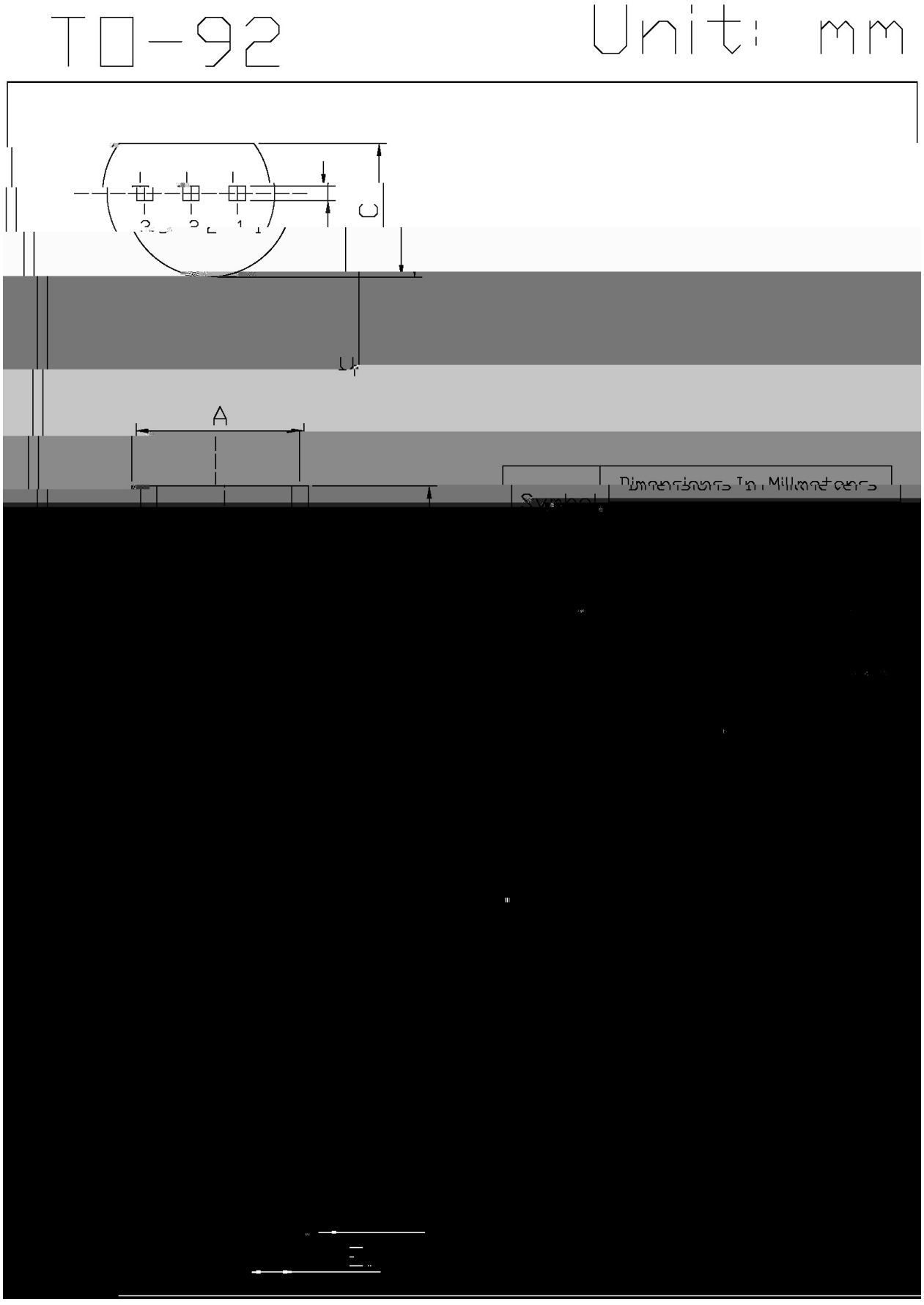
/ Electrical Characteristic Curve



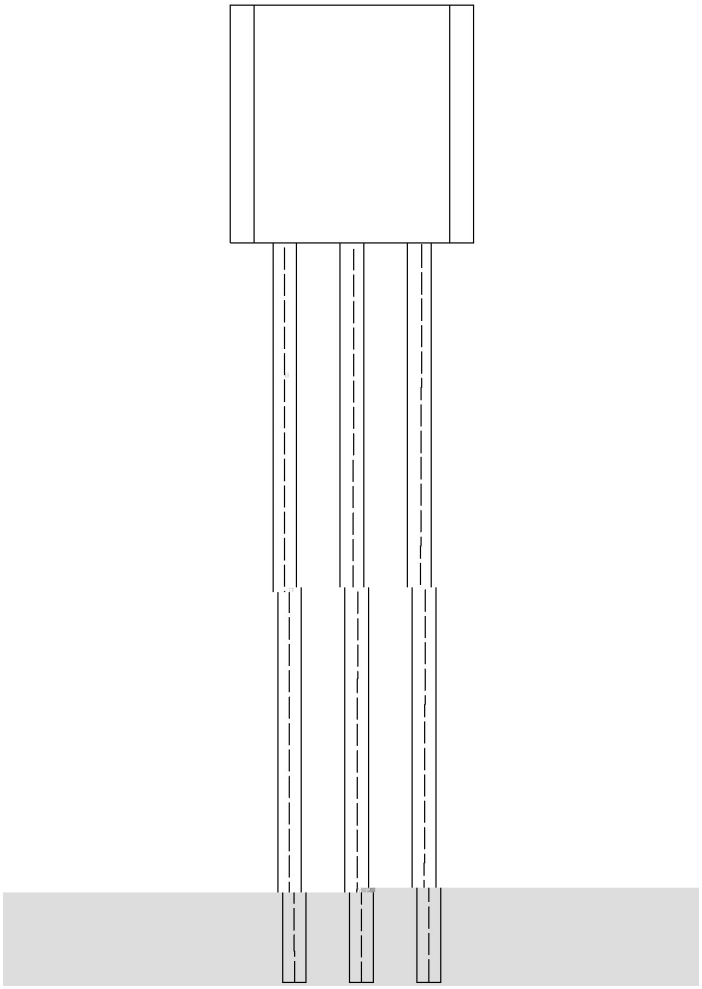
$V_{CE(sat)}$ $V_{BE(sat)}$ – I_C

f_T – I_C

/ Package Dimensions



/ Marking Instructions



9013

D: h_{FE}

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



					Note:
1	25	150	60	90sec;	1.Preheating:25~150