



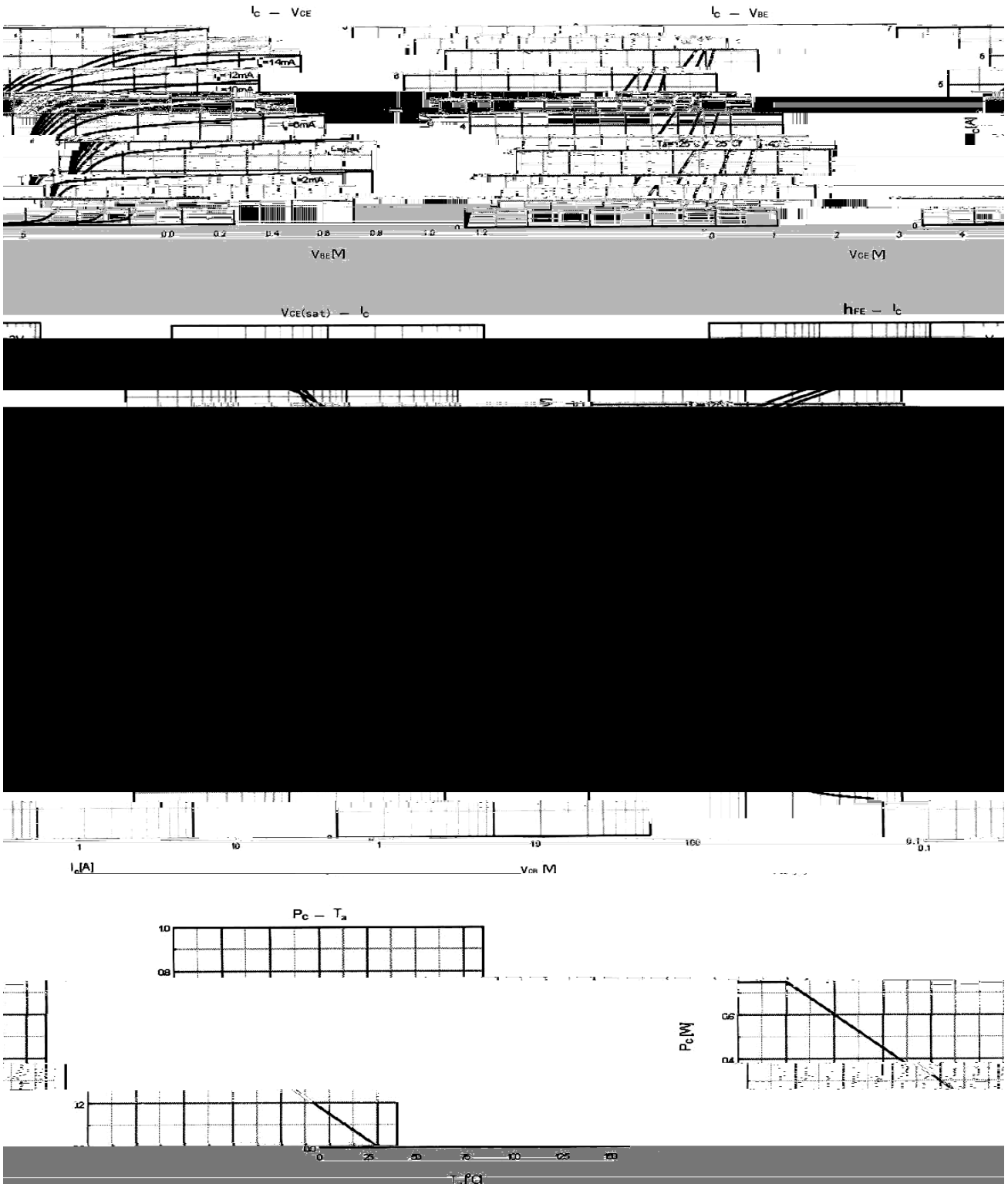
**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	40	V
Collector to Emitter Voltage	$V_{CEO}$	20	V
Emitter to Base Voltage	$V_{EBO}$	7.0	V
Collector Current - Continuous	$I_C$	5.0	A
Collector Power Dissipation	$P_C$	750	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 Emitter Breakdown Voltage	$V_{CEO}$	$I_C=1.0mA$ $I_B=0$	20			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=100\mu A$ $I_C=0$	7			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=10V$ $I_E=0$			0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=7.0V$ $I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=2.0V$ $I_C=0.5A$	700	1000		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3.0A$ $I_B=0.1A$			0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=3.0A$ $I_B=0.1A$			1.5	V
Transition Frequency	$f_T$	$V_{CE}=6.0V$ $I_C=50mA$		150		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=20V$ $I_E=0$ $f=1.0MHz$		25		pF

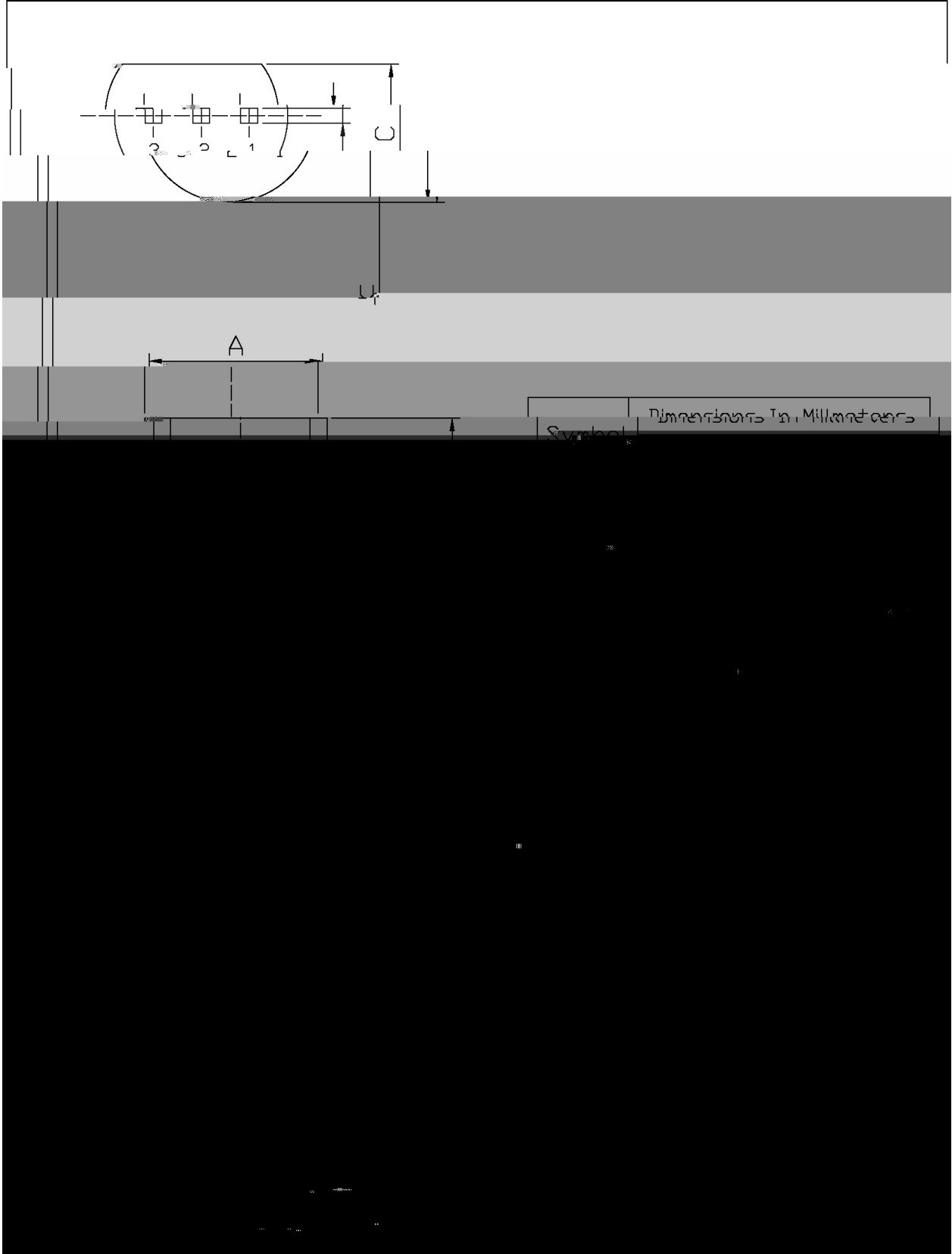
/ Electrical Characteristic Curve



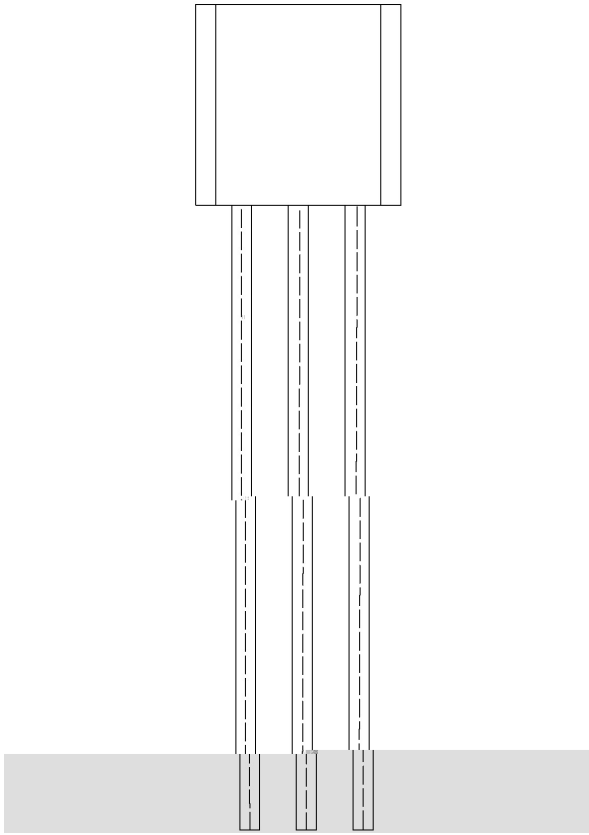
/ Package Dimensions

TO-92

Unit: mm



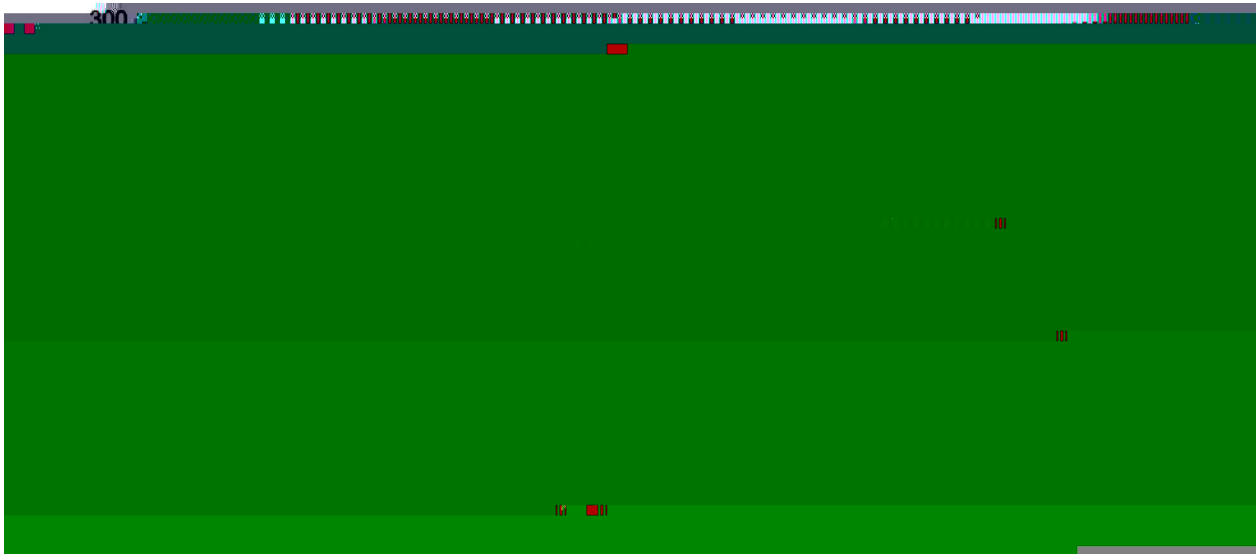
/ Marking Instructions



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



1	25	150	60	90sec;	Note:	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
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/ Packaging SPEC.

/ BULK

Package Type