/ Descriptions

VRW0656 ḾḾ Ł QSQ ÆṀ ч s ǁ ㄱ Silicon NPN transistor in a SOT-323 Plastic Package.

/ Features

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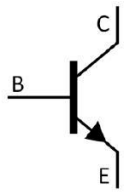
High DC current gain, high voltage, complementary to 2SA1611.

/ Applications

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Audio frequency general purpose amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 χ Emitter PIN 2 χ Base PIN 3 χ Collector

/ Marking

h_{FE} Classifications Symbol	O	Y	G	L
h_{FE} Range	90 180	135 270	200 400	300 600
Marking	HL4	HL5	HL6	HL7

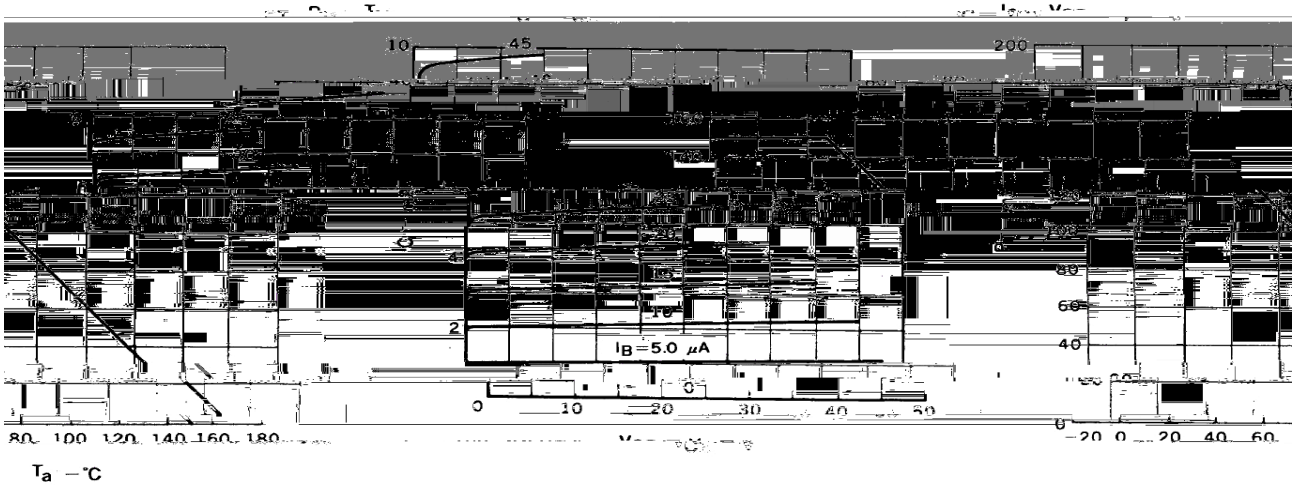
/ Absolute Maximum Ratings(Ta=25)

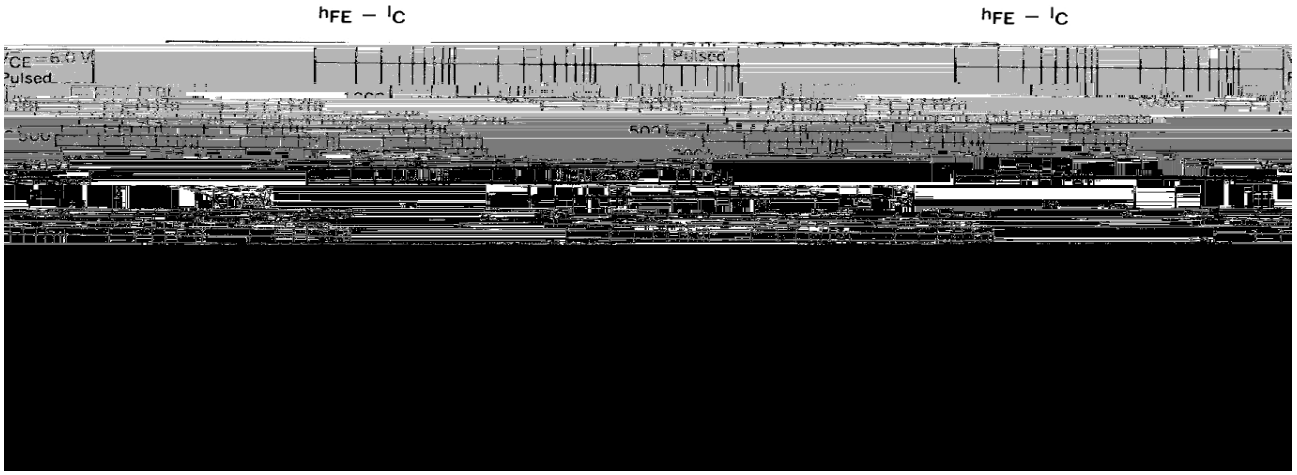
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

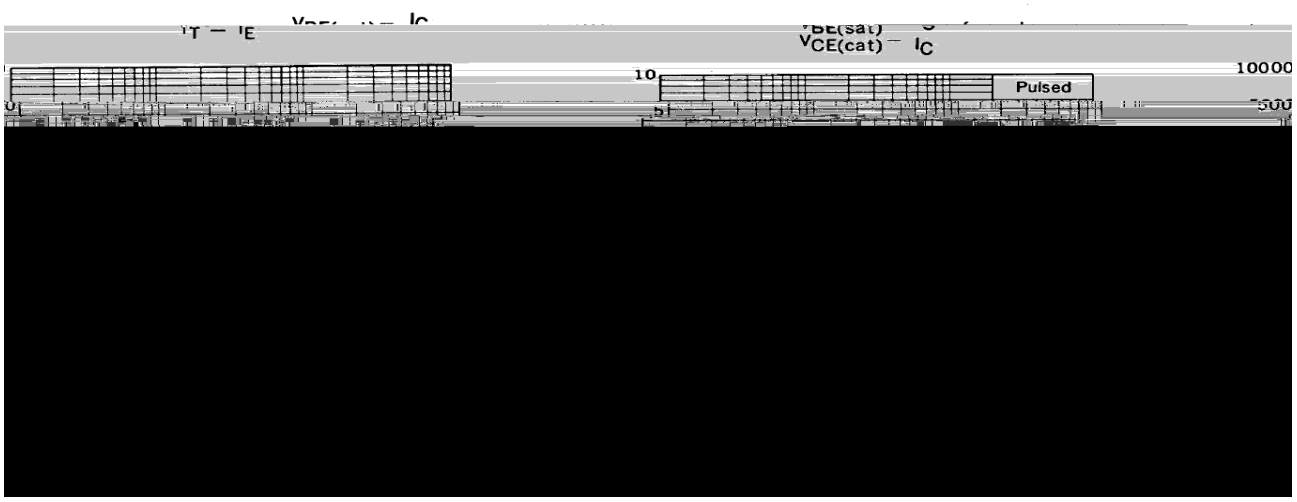
/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	Ш :ϯ ϒ Test Conditions	ω ṇ Ö Min	Ɛ ʒ Ö Typ	ω ᶻ Ö Max	D Ч Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V I_E=0			0.1	A
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.1	A
DC Current Gain	h_{FE}	V_{CE}=6.0V I_C=1.0mA	90	200	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=10mA		0.15	0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA I_B=10mA		0.86	1.0	V
Collector-Emitter Voltage	V_{BE}	V_{CE}=6.0V I_C=1.0mA	0.55	0.62	0.65	V
Transition Frequency	f_T	V_{CE}=6.0V I_E=-10mA		250		MHz
Output Capacitance	C_{ob}	V_{CB}=6.0V I_E=0 f=1.0MHz		3.0		pF

/ Electrical Characteristic Curve



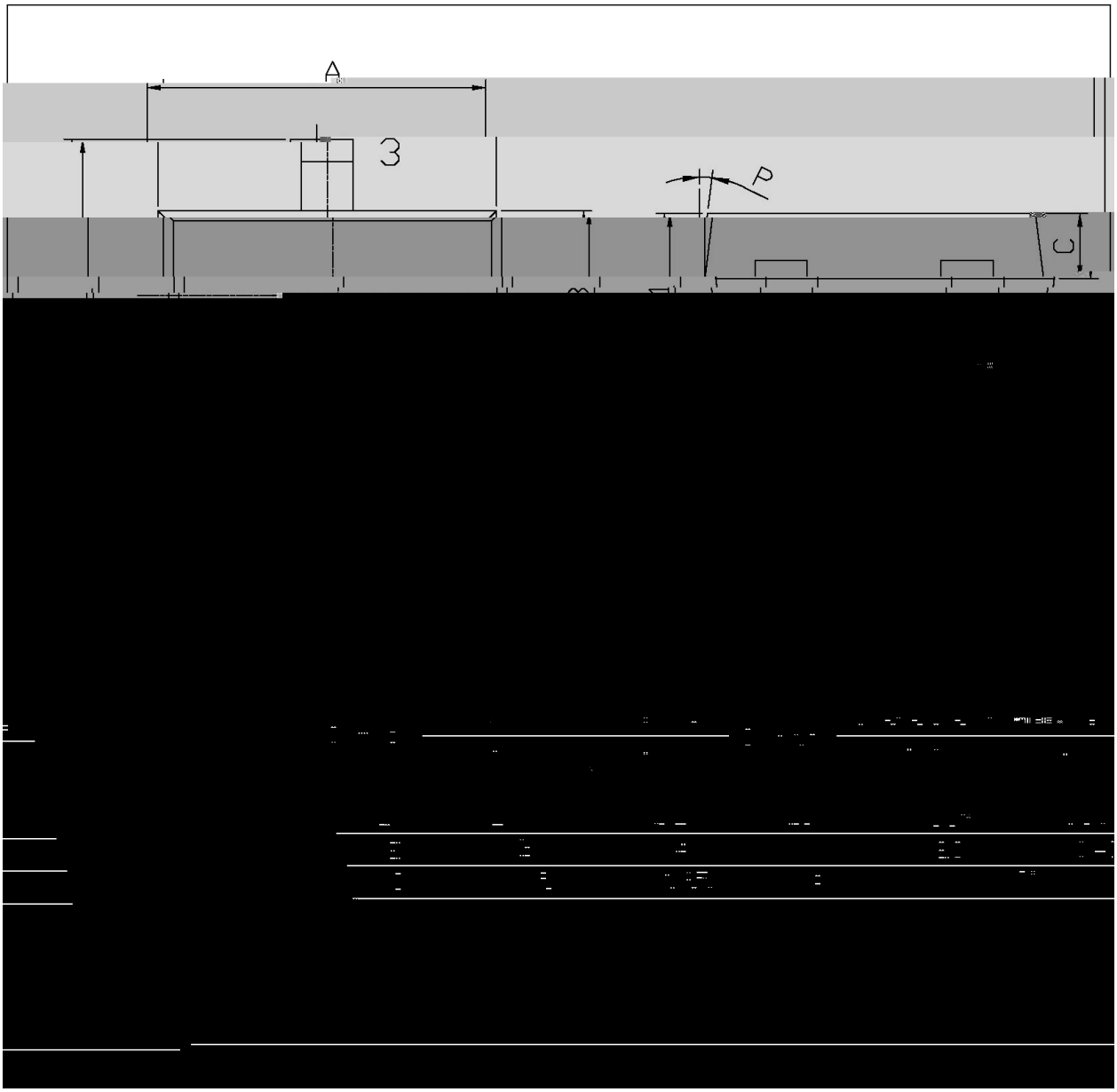




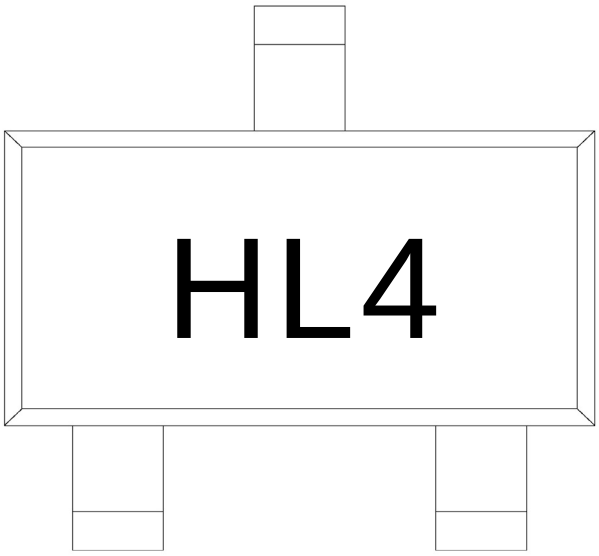
/ Package Dimensions

SOT-323

单位：mm



/ Marking Instructions



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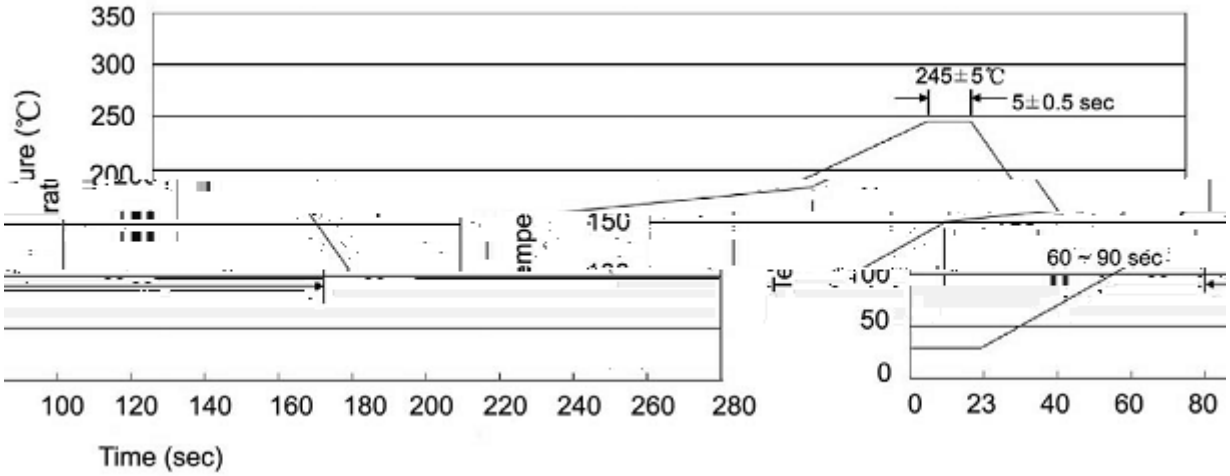
L4 χ ѭ ϔ ᴺ Ꮷ

Note:

H: Company Code.

L4: Product Type.

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı ˋH ڑ 60 Ḱ 90sec;

2 Š Ë □ ỷ 245 ° 5 ł ı ˋH ڑ ˋY ㅅ ㎛ 5 ° 0.5sec;

3 ì ˙ ㅓ ˛ ɔ ෯ ỷ ㎛ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:25~150 ł , Time:60~90sec.

2.Peak Temp.:245 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ł ˋH ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

ɔ ` ㅓ Ł / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices