/ Descriptions

WR0459 Ṃ Ṃ Ł QSQ Æ Ṁ ɥ s ǁ ˥ Silicon NPN transistor in a TO-126 Plastic Package.

/ Features

ㅊ ㅣ ǎ̆ S_F@418 Z ε Ta@58 ɬ ζ

High Power Dissipation :P_C=1.5W(Ta=25).

/ Applications

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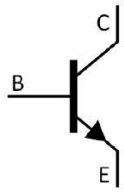
Low collector saturation voltage ,large current.

/ Equivalent Circuit



/ Pinning



PIN1 χ Emitter PIN 2 χ Collector PIN 3 χ Base

/ h_{FE} Classifications & Marking

ð м ˥ ب ˝ See Marking Instructions.

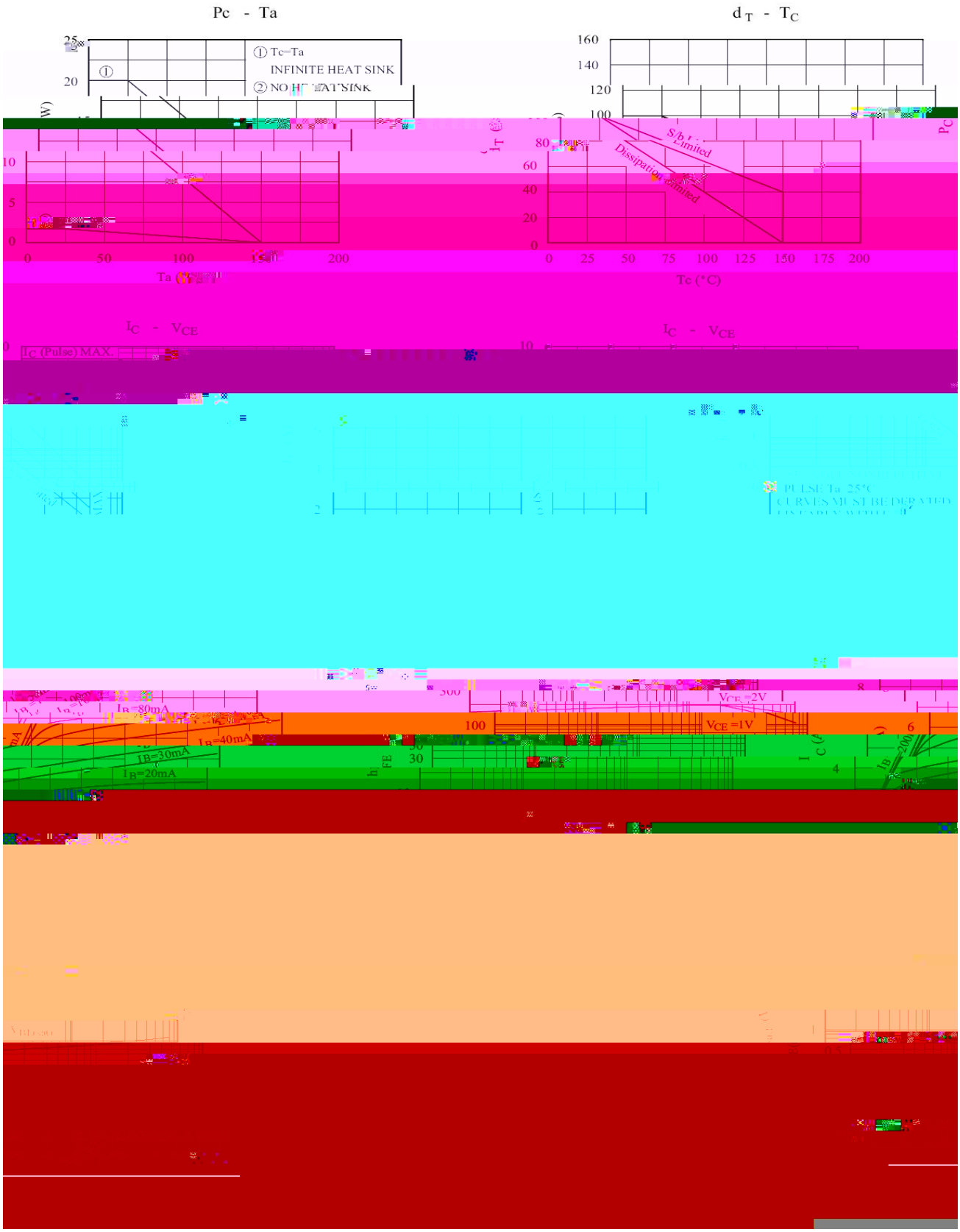
/ Absolute Maximum Ratings(Ta=25)

v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	5.0	A
Peak Collector Current	I_{CP}	8.0	A
Base Current - Continuous	I_B	1.0	A
Collector Power Dissipation	P_C	1.5	W
Collector Power Dissipation	P_C(Tc=25)	20	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

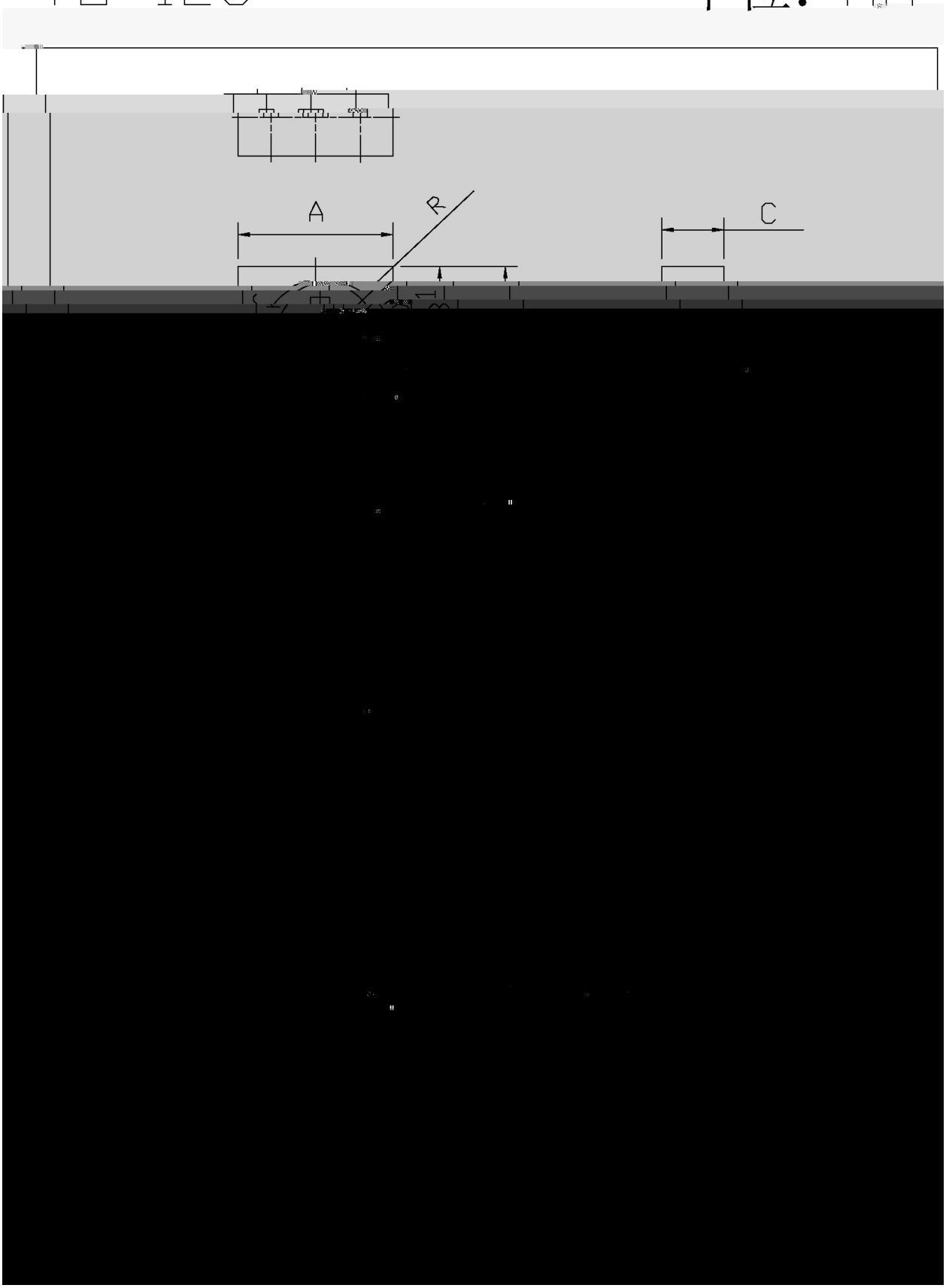
v ̈Ω̣ Parameter	ɬ N Symbol	⊥⊥ ;ǀ Ţ Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Collector Cut-off Current	I_{CBO}	V_{CB}=50V I_E=0			10	A
Emitter Cut-off Current	I_{EBO}	V_{EB}=7V I_C=0			10	A
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V I_C=2.0A	100		400	
	$h_{FE(2)}$	V_{CE}=1.0V I_C=0.1A	60			
	$h_{FE(3)}$	V_{CE}=2.0V I_C=5.0A	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2.0A I_B=0.2A		0.1	0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=2.0A I_B=0.2A		0.9	1.2	V
Turn On Time	t_{on}	V_{CC}=10V I_B=0.2A		0.2	1	s
Fall Time	t_f			1.1	2.5	s
Storage Time	t_S			0.2	1	s

/ Electrical Characteristic Curve

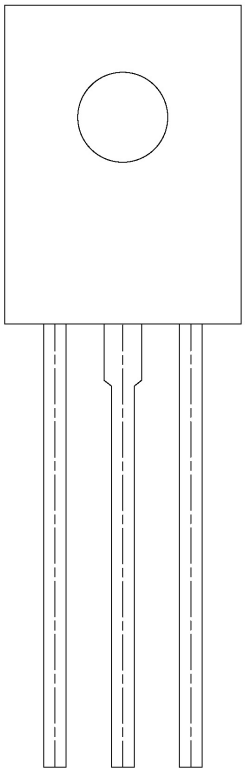


/ Package Dimensions

TO-126 单位：mm



/ Marking Instructions



ب ˝ χ

EU χ ⌘ ⅋ ᴹ ⊓ᴅ

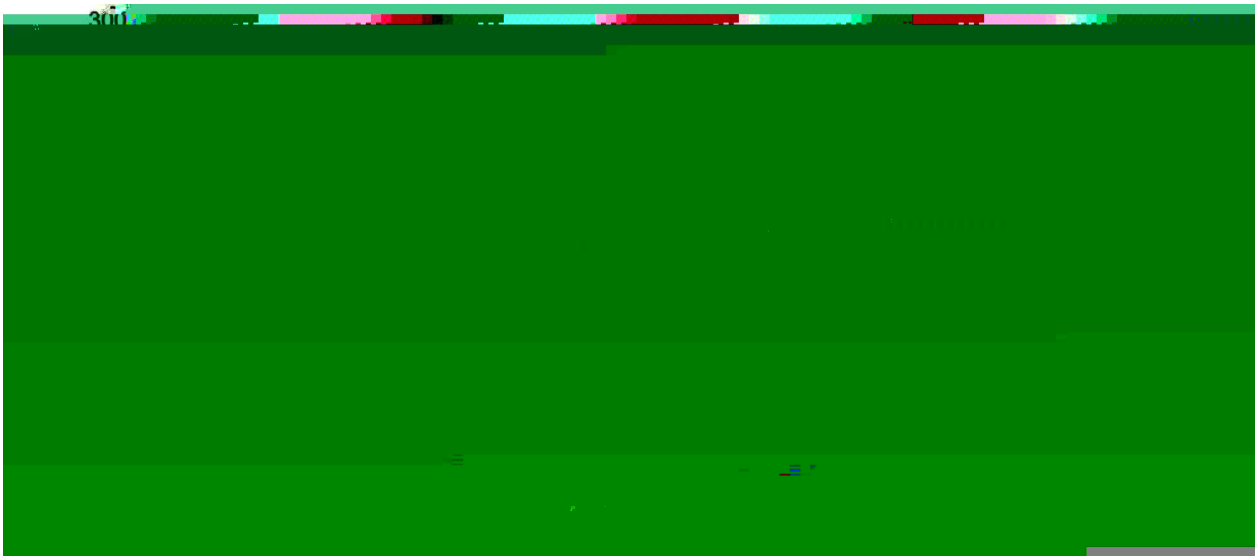
G49<4 χ ⌘ ⅋ ᴺ ⊓ᴅ

---- χ ⌘ ⅃ ⅎ ᴹ̈ ᴺ ⊓ᴅ ⅃ ⅋ ⅃ ⅎ ᴹ̈ ᴺ ᴹ ⅋

Note:

BR:

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



ب ˝ χ

1 ƚ ♬ □ ỷ 25 Ḱ 150 ɬ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 255 ° 5 ɬ ı `H ڑ ˋY ⺈ ⺾ 5 ° 0.5sec;

3 ì ˙ ⺈ ˛ ɔ ھ ỷ ⺾ 2 Ḱ 10 ɬ /sec.

Note:

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

2.Peak Temp.:255 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 270 ° 5 ɬ `H ڑ χ 10 ° 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

ˋΩ ţ ɣ ŁŁ / BULK

Package Type	Units					Dimension (unit mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-126/F	500	6	3,000	5	15,000	135×190	237×172×102	560×245×195

ˇ ˊ ɣ ŁŁ / TUBE

Package Type	Units					Dimension (unit mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-126/F	65	26	1,690	5	8,450	532×31×5.6	555×164×50	575×290×180

/ Notices