/ Descriptions

WR0459I ṂṂ ƚ QSQ ᴁṀ ɥ s Ⅱ ㇵ Silicon NPN transistor in a TO-126F Plastic Package.

/ Features

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Low $V_{CE(sat)}$, high current and high f_T, excellent linearity of h_{FE}, fast switching time.

/ Applications

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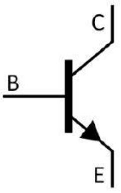
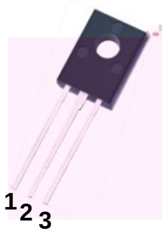
Relay drivers, high-speed inverters, general high-current switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Emitter PIN 2 χ Collector PIN 3 χ Base

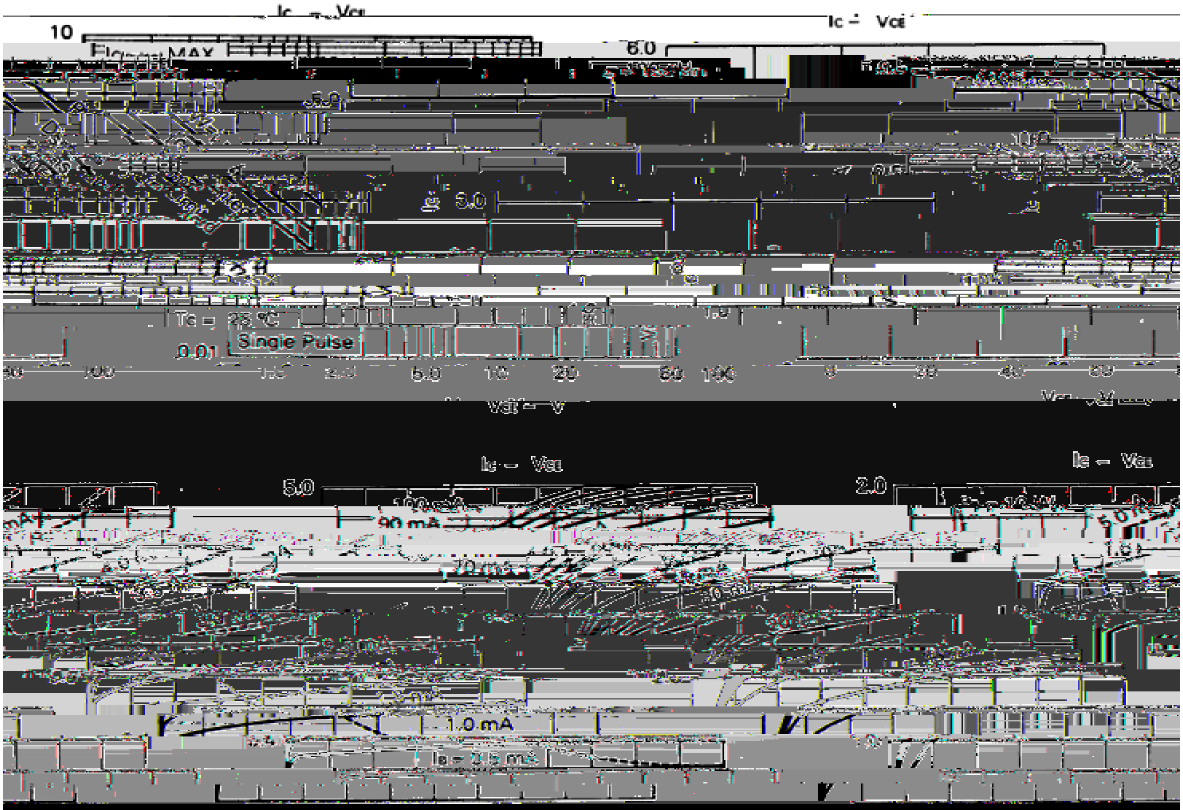
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	M	L	K
h_{FE} Range	100 200	160 320	200 400

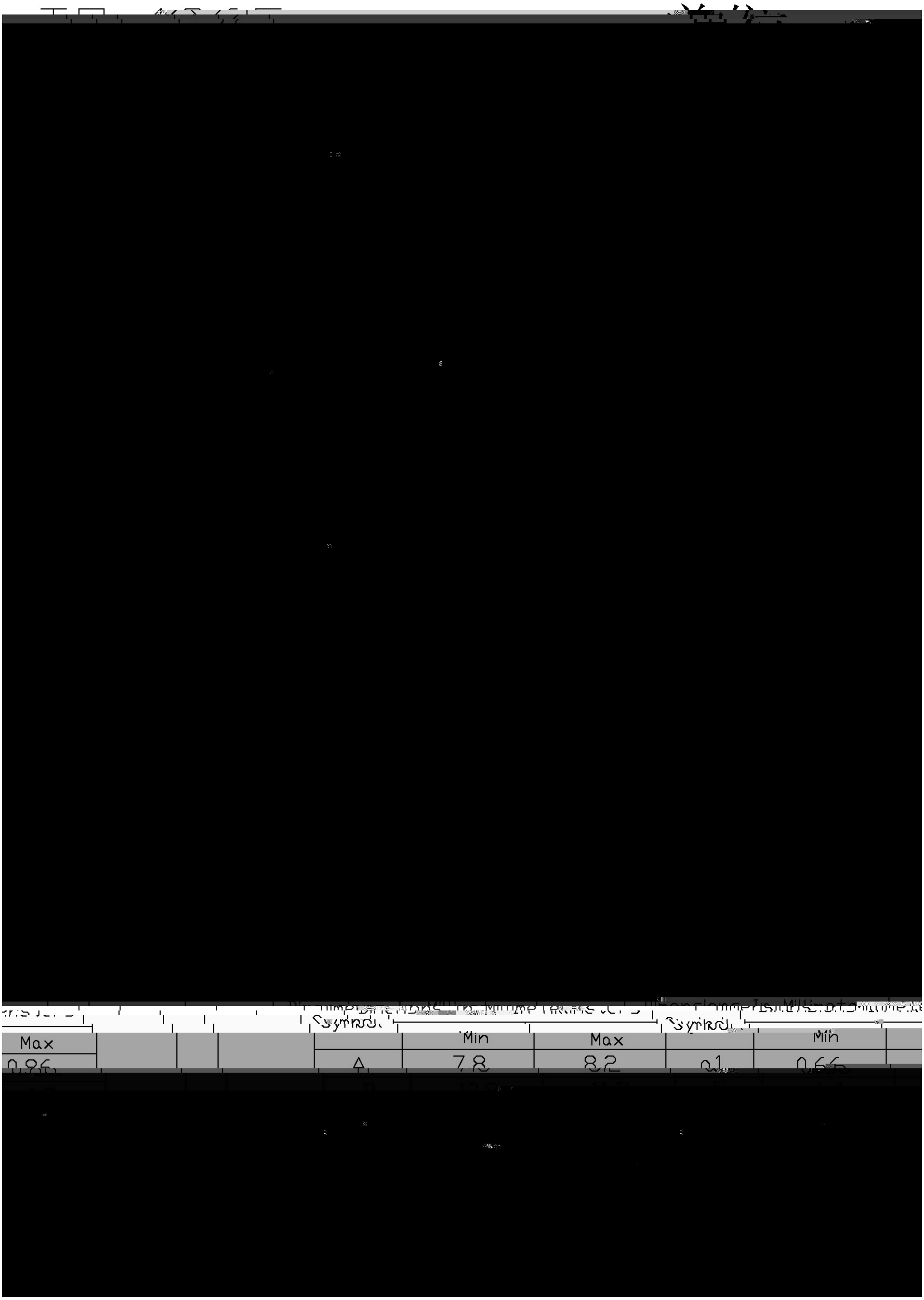
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	P_C(Tc=125)	10	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit

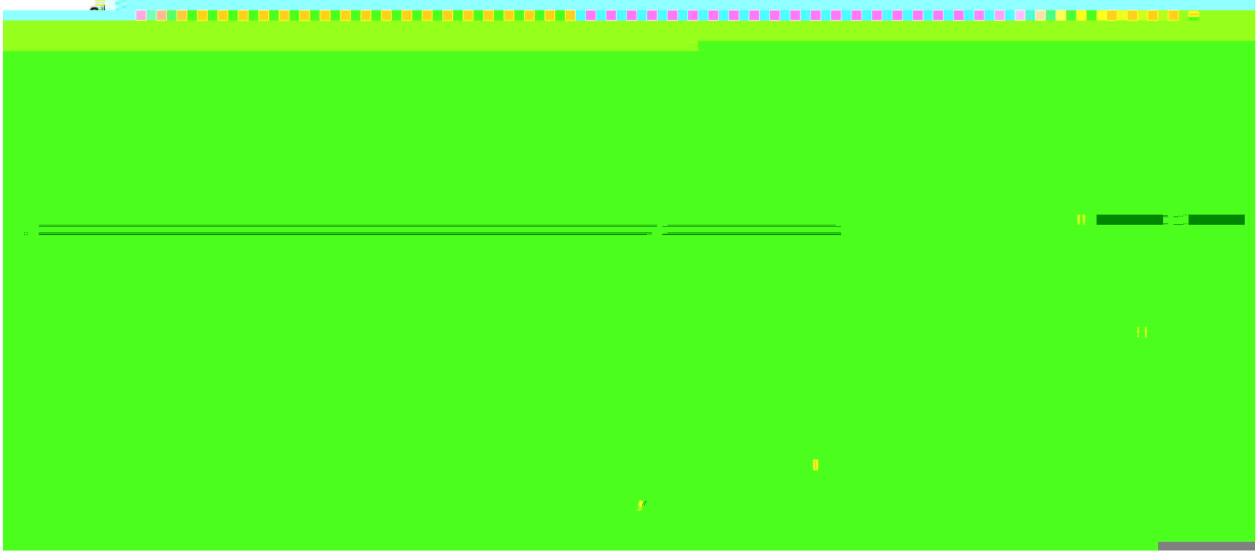
/ Electrical Characteristic Curve



/ Package Dimensions



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



ب ˝ χ
1 ỉ ♬ □ ŷ 25 Ḱ 150 ﾅ ı `H ڑ 60 Ḱ 90sec;
2 Ś Ӫ □ ŷ 255 ° 5 ﾅ ı `H ڑ ʽY ﾑ ꭎ 5 ° 0.5sec;
3 ì ˙ ˥ ˛ ɔ ﻫ ŷ ꭎ 2 Ḱ 10 ﾅ /sec.

Note:
1.Preheating:25~150 ﾅ , Time:60~90sec.
2.Peak Temp.:255 ° 5 ﾅ , Duration:5 ° 0.5sec.
3. Cooling Speed: 2~10 ﾅ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ŷ χ 270 ° 5 ﾅ `H ڑ χ 10 ° 1 sec.

Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

῟Ω ʇ ɣ Ŀ / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	