

/ Descriptions

WR0459I QSQ Silicon NPN transistor in a TO-126F Plastic Package.

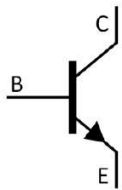
/ Features

/
High V_{CEO} , low C_{ob} .

/ Applications

Video output amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions.

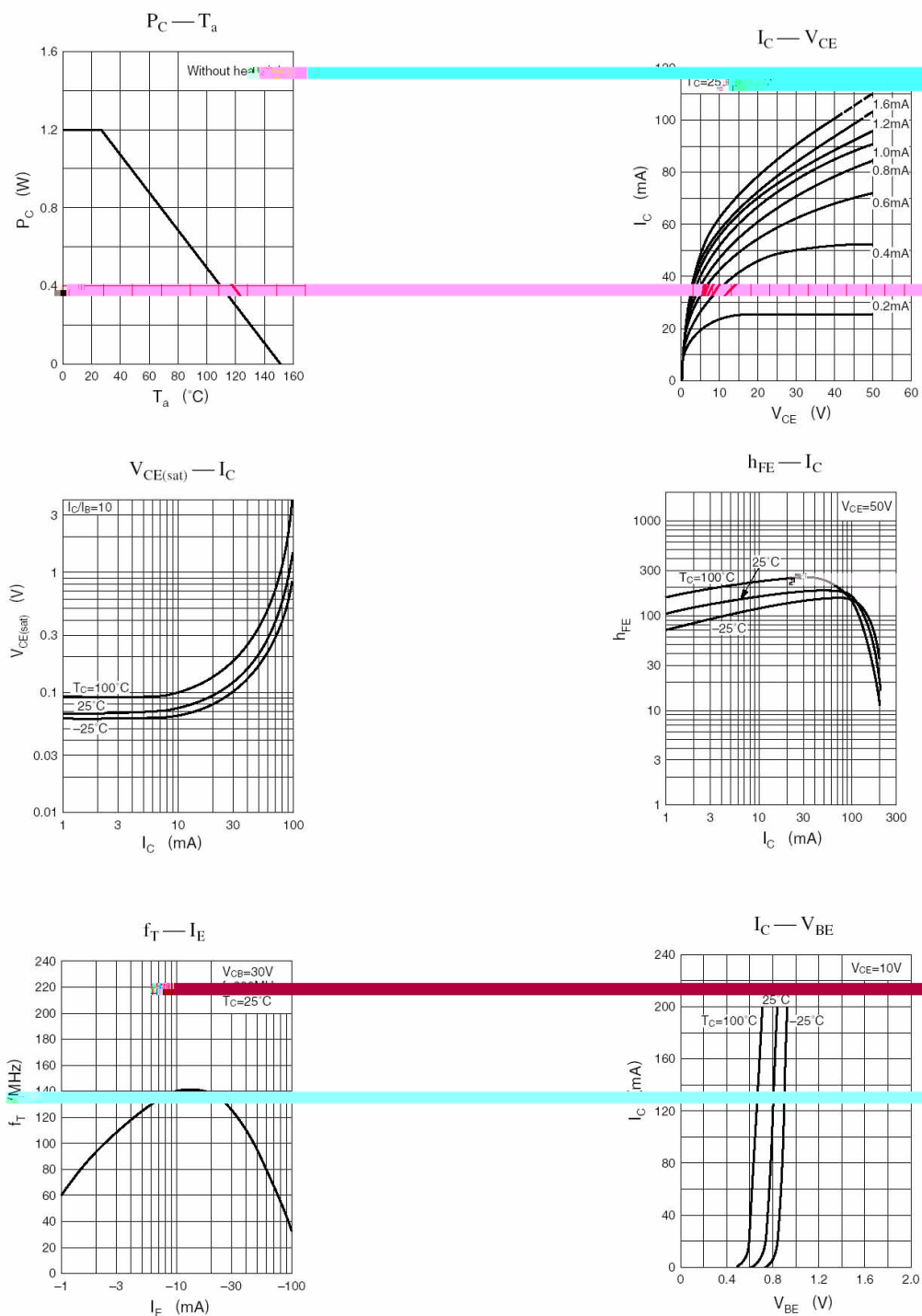
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	100	mA
Collector Current – Continuous(Pulse)	I_{CP}	200	mA
Collector Power Dissipation	P_C	1.2	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

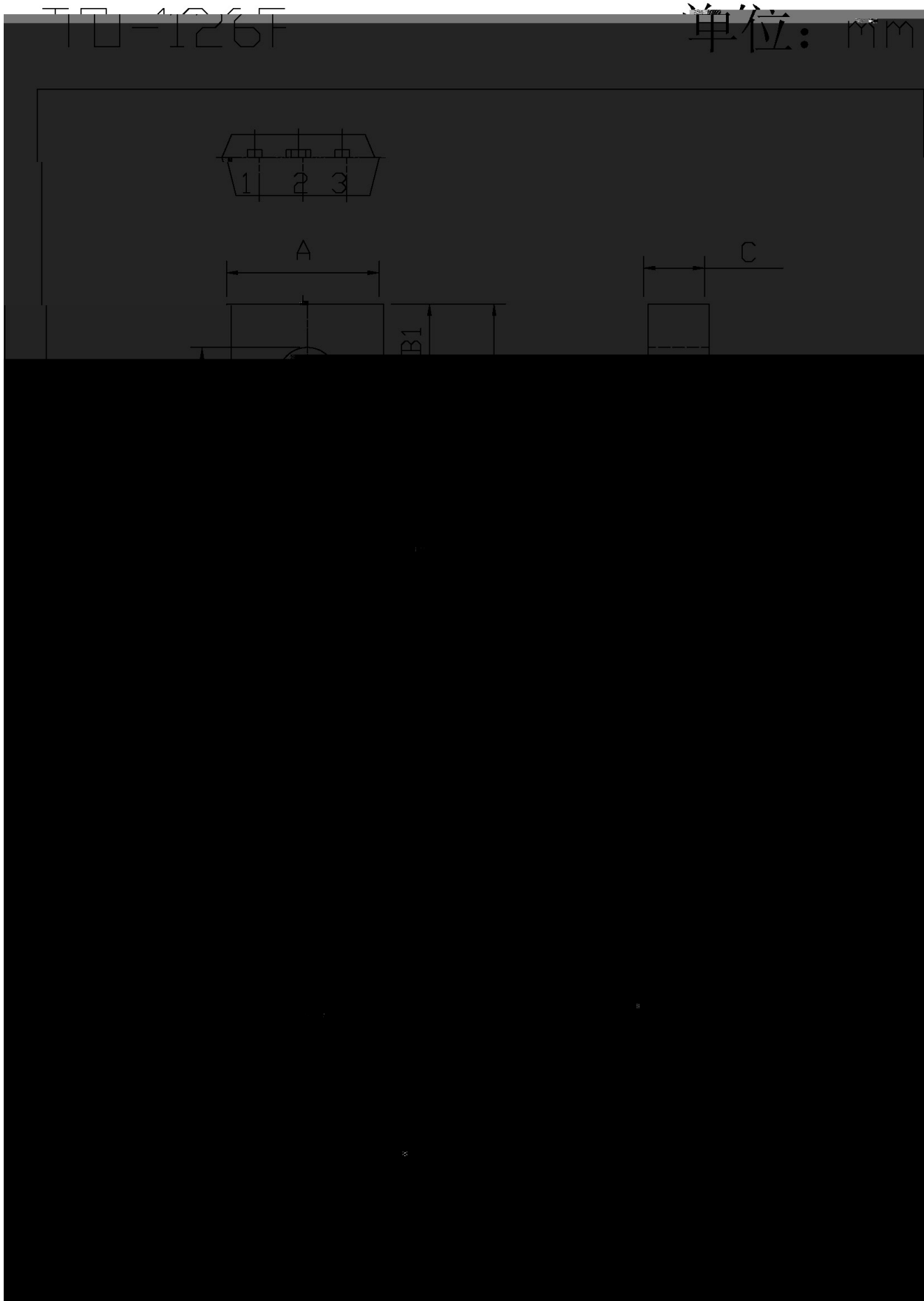
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\text{ A}$ $I_E=0$	300			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=0.1\text{mA}$ $I_B=0$	300			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	7.0			V
DC Current Gain	h_{FE}	$V_{CE}=50\text{V}$ $I_C=5.0\text{mA}$	50		250	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=30\text{mA}$ $I_B=3.0\text{mA}$			1.5	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=10\text{V}$ $I_C=30\text{mA}$			1.2	V
Transition Frequency	f_T	$V_{CB}=30\text{V}$ $I_C=20\text{mA}$	70	140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=30\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		2.4		pF

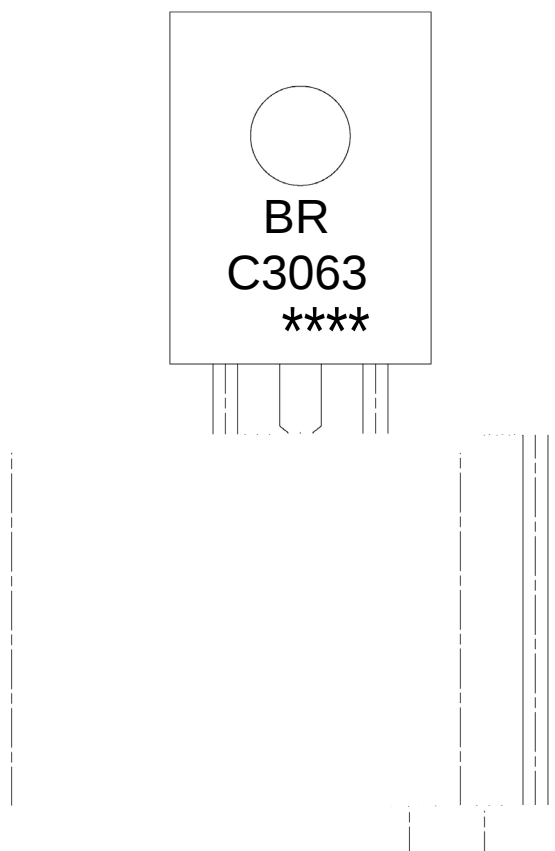
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



EU

F6396

Note:

BR: Company Code

C3063: Product Type.

****: Lot No. Code, code change with Lot No.

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



Note:

- | | | | | | |
|---|-----|------|----|----------|---|
| 1 | 25 | 150% | 60 | 90sec; | 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

/ Packaging SPEC.

/ 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

/ 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