2SC5027

Rev.E Mar.-2016

DATA SHEET

/ Descriptions

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

/ Features

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High voltage, small collector output, capacitance.

/ Applications

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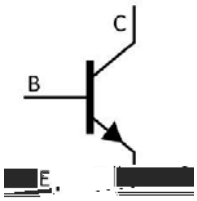
High voltage switching and amplifier applications, color TV chroma output applications and, color TV horizontal driver.

/ Equivalent Circuit



/ Pinning

PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions.

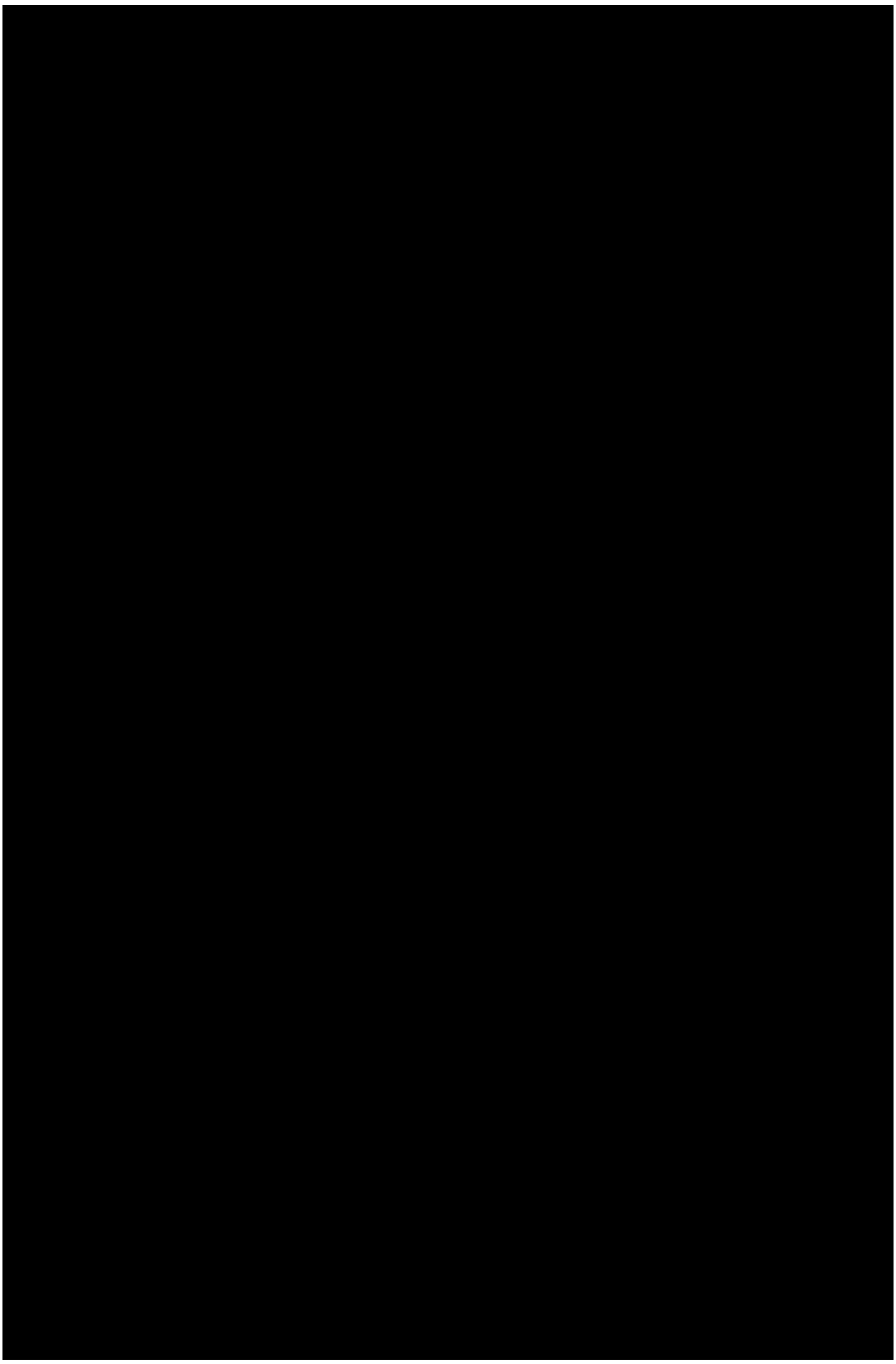
/ Absolute Maximum Ratings(Ta=25)

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
Base Current- Continuous	I_B	50	mA
Collector Power Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

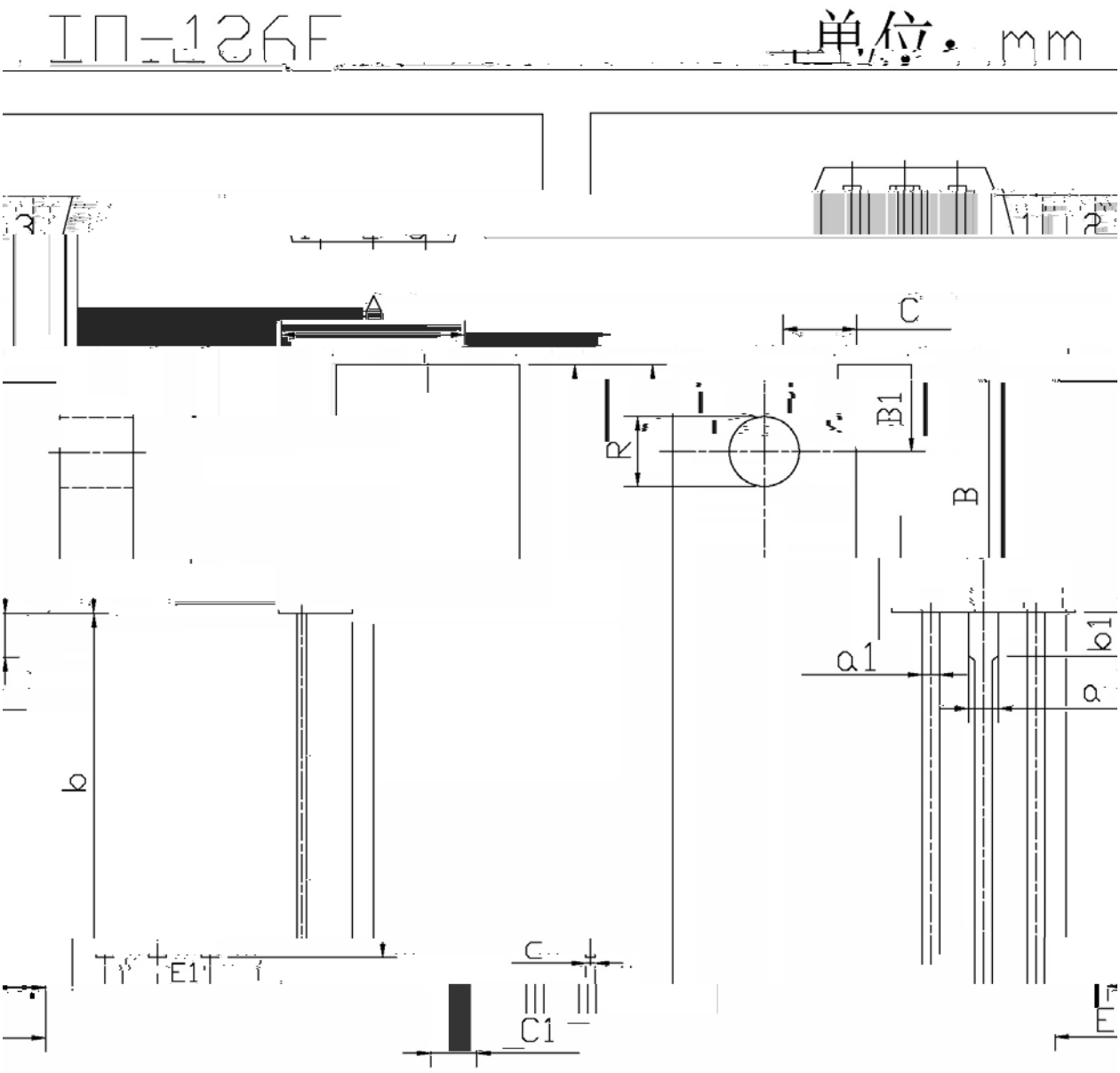
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=240V I_E=0			1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=7.0V I_C=0			1.0	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=10V I_C=20mA	30		200	
	$h_{FE(2)}$	V_{CE}=10V I_C=4.0mA	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA I_B=1.0mA			1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA I_B=1.0mA			1.0	V
Transition Frequency	f_T	V_{CE}=10V I_C=20mA	50	70		MHz
Collector output capacitance	C_{ob}	V_{CB}=20V I_E=0 f=1.0MHz		3.0		pF

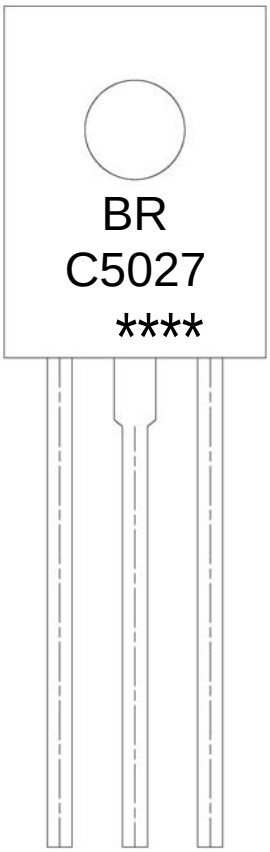
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

C5027

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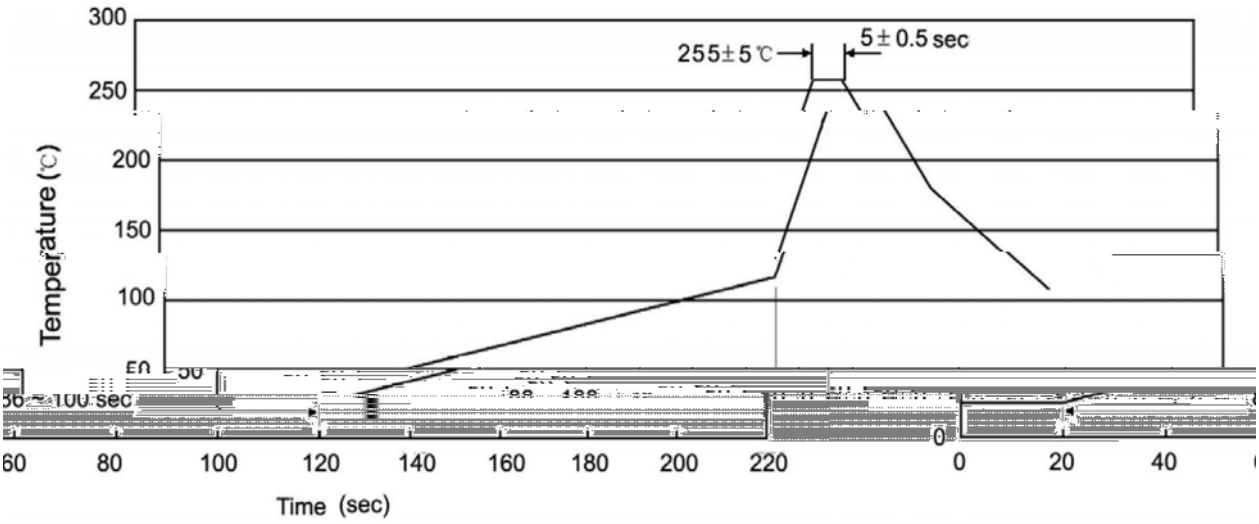
Note:

BR:	Company Code
C5027:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



Note:

1 25 150