

KF (\$) - E GE Silicon NPN transistor in a TO-126 Plastic Package.

) J8(O\* J  
High  $f_T$ , complementary pair with 2SA1930S.

General power and driver stage amplifier applications.



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	$V_{CBO}$	180	V
Collector to Emitter Voltage	$V_{CEO}$	180	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current - Continuous	$I_C$	2.0	A
Base Current	$I_B$	1.0	A
Collector Power Dissipation	$P_C$	1.5	W
Collector Power Dissipation	$P_C(T_c=25 )$	20	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

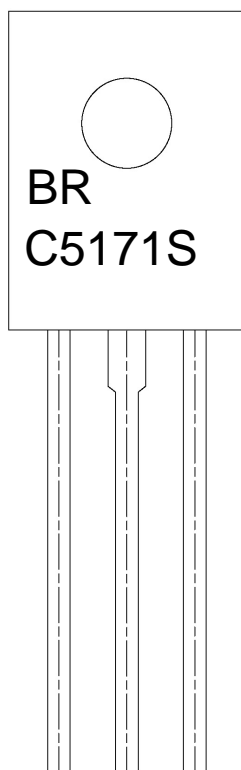
**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=10mA$ $I_B=0$	180			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=180V$ $I_E=0$			5.0	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=5.0V$ $I_C=0$			5.0	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=100mA$	100		320	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=1.0A$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.0A$ $I_B=100mA$		0.16	1.0	V
Base to Emitter Saturation Voltage	$V_{BE}$	$V_{CE}=5.0V$ $I_C=1.0A$		0.68	1.5	V
Transition Frequency	$f_T$	$V_{CE}=5.0V$ $I_C=300mA$		200		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		16		pF



**2SC5171S**  
Rev.F Mar.-2016

/ Marking Instructions



BR

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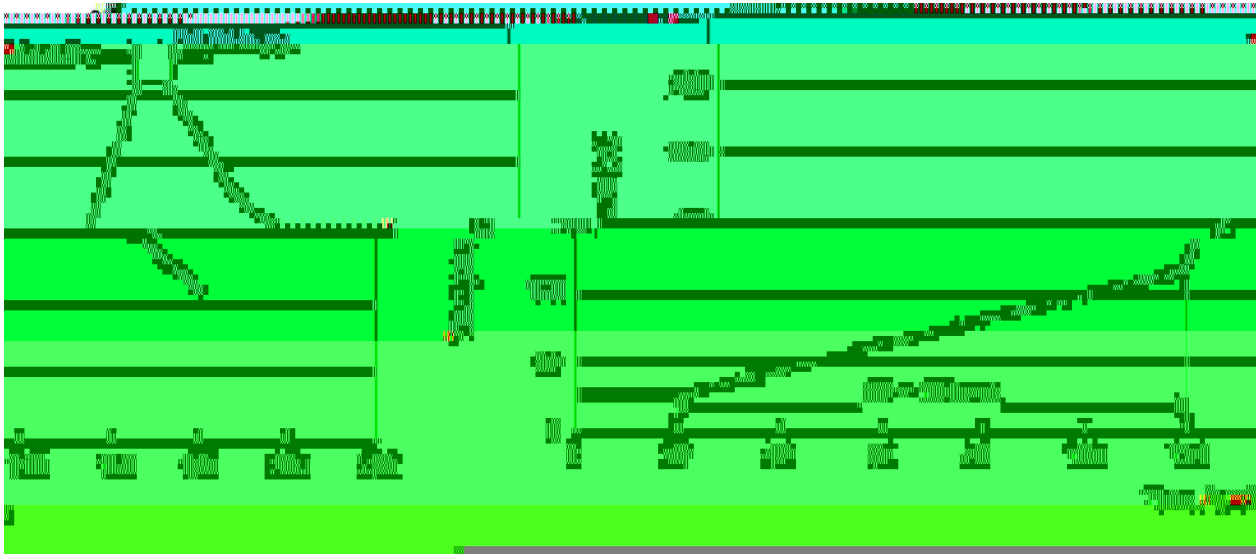
Note:

BR: Company Code

C5171S: Product Type.

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

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



- |   |        |     |            |        |   |                                      |
|---|--------|-----|------------|--------|---|--------------------------------------|
| 1 | 25     | 150 | 60         | 90sec; | Note:                                     | 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 <sup>3</sup> )
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