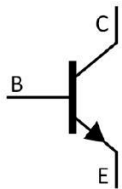


WR0459 ММ Ё QSQ Æ М ы s ll 1 Silicon NPN transistor in a TO-126 Plastic Package.

≤ ё l ' ы l Ё 5VD4<63V Ы '
High f_T , complementary pair with 2SA1930S.

Ё^ˆ ˆ l ' Ѡ з ы Ѡ Ѡ з
General power and driver stage amplifier applications.



PIN1 χ Emitter PIN 2 χ Collector PIN 3 χ Base

/ h_{FE} Classifications & Marking

Ѡ М Ѡ Ё " See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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	$P_C(T_c=25^\circ\text{C})$	20	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

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

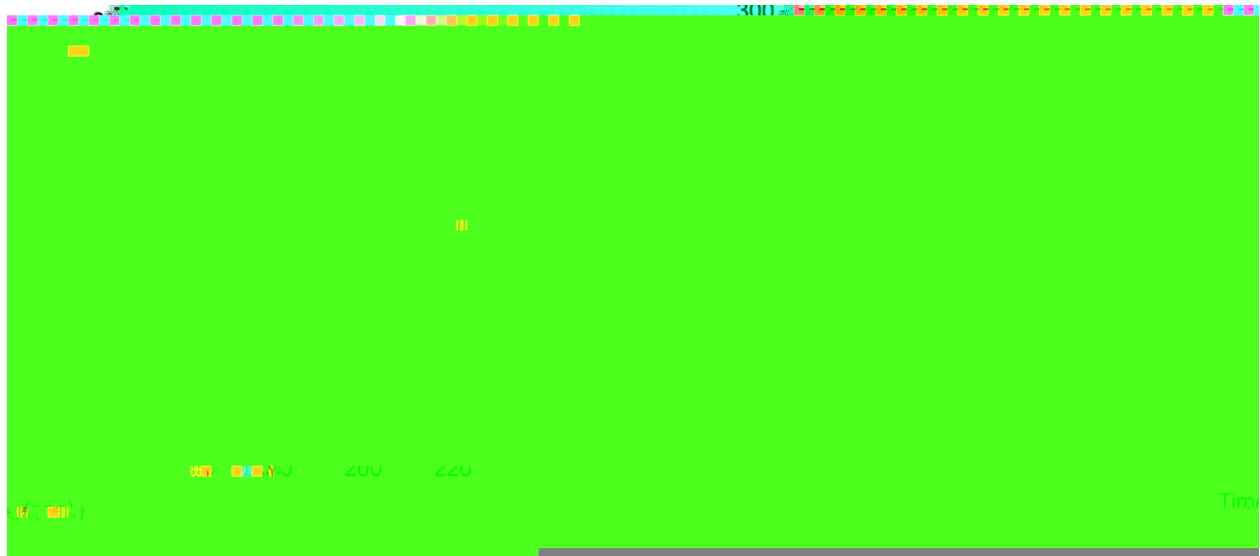
2SC5171S

Rev.F Mar.-2016

BR
C5171S

Lot No. Code, code change with Lot No.

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



б " X

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

Note:

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

/ Resistance to Soldering Heat Test Conditions

□ °C 270 ± 5 °C, Time: 10 ± 1 sec. Temp.: 270 ± 5 °C Time: 10 ± 1 sec

/ Packaging SPEC.

“Q” T Y E / BULK

Package Type	Units	Dimension	(unit mm ³)
--------------	-------	-----------	-------------------------