

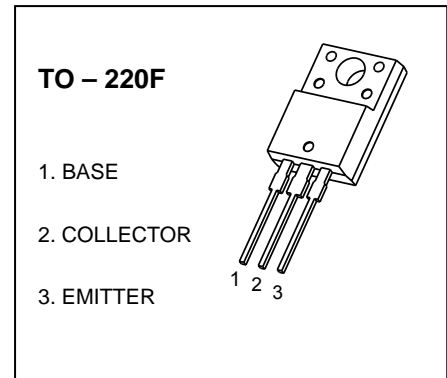
2SC5171 TRANSISTOR (NPN)

FEATURES

- High Transition Frequency
- Power Amplifier Applications

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

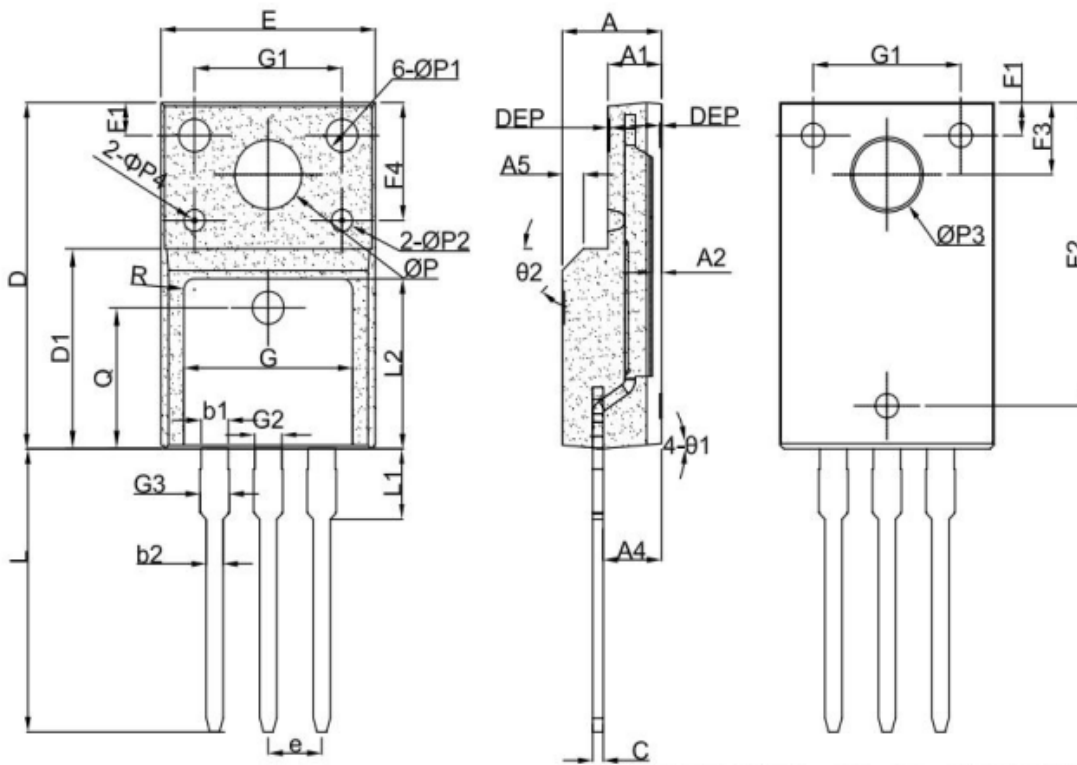
Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	180	V
V _{CEO}	Collector-Emitter Voltage	180	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	2	A
P _C	Collector Power Dissipation	2	W
R _{θJA}	Thermal Resistance From Junction To Ambient	62.5	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	180			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C =10mA, I _B =0	180			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =1mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =180V, I _E =0			5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			5	μA
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =0.1A	100		320	
	h _{FE(2)} *	V _{CE} =5V, I _C =1A	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1A, I _B =100mA			1	V
Base-emitter voltage	V _{BE}	V _{CE} =5V, I _C =1A			1.5	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		16		pF
Transition frequency	f _T	V _{CE} =5V, I _C =300mA		200		MHz

*Pulse test



图中阴影为麻面Ra0.8-1.2, 其他面为亮面Ra0.2-0.4

SYMBOL	mm		
	MIN	NOM	MAX
*A	4.50	4.70	4.90
*A1	2.34	2.54	2.74
*A2	0.38	0.43	0.48
*A4	2.66	2.76	2.86
A5	1.0REF		
b1	1.15	1.20	1.25
*b2	0.75	0.80	0.85
*c	0.45	0.50	0.60
*D	15.67	15.87	16.07
*D1	9.04	9.12	9.20
*e	2.49	2.54	2.59
*E	10.00	10.16	10.32
E1	9.94	10.04	10.14
E2	9.36	9.46	9.56
F1	1.40	1.50	1.60
F2	13.80	13.90	14.00
*F3	3.20	3.30	3.40
F4	5.30	5.40	5.50
G	7.80	8.00	8.20
G1	6.90	7.00	7.10
*G3	1.15	-	1.30
K1	0.65	0.70	0.75
*L	12.78	12.98	13.18
*L1	3.13	3.23	3.33
L2	7.40	7.50	7.60
Q	6.5REF		
R	0.5REF		
*ØP	3.08	3.18	3.28
ØP1	1.40	1.50	1.60
ØP2	0.95	1.00	1.05
ØP3	3.35	3.40	3.45
ØP4	0.15	0.20	0.25
*θ1	3°	5°	7°
θ2	-	45°	-
DEP	0.05	0.1	0.15

带*为检验尺寸

