

2SC5271

Silicon NPN Triple Diffused Planar Transistor

Application : Resonant Switching Regulator and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	2SC5271	Unit
V _{CB0}	300	V
V _{CE0}	200	V
V _{EB0}	7	V
I _C	5(Pulse10)	A
I _B	2	A
P _C	30(T _C =25°C)	W
T _J	150	°C
T _{stg}	-55 to +150	°C

Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SC5271	Unit
I _{CB0}	V _{CB} =300V	100max	μA
I _{EB0}	V _{EB} =7V	100max	μA
V _{(BR)CEO}	I _C =10mA	200min	V
h _{FE1}	V _{CE} =2V, I _C =2.5A	10to30	
h _{FE2}	V _{CE} =2V, I _C =1mA	15min	
V _{CE(sat)}	I _C =2.5A, I _B =0.5A	1.0max	V
V _{BE(sat)}	I _C =2.5A, I _B =0.5A	1.5max	V
f _T	V _{CE} =12V, I _E =-0.5A	10typ	MHz
C _{OB}	V _{CB} =10V, f=1MHz	45typ	pF

Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (A)	I _{B2} (A)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
150	60	2.5	10	-5	0.5	-1.0	0.3max	1.0max	0.1max

External Dimensions FM20(TO220F)

