

2SC5271

Silicon NPN Triple Diffused Planar Transistor

Application : Resonant Switching Regulator and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	2SC5271	Unit
V _{CBO}	300	V
V _{CEO}	200	V
V _{EBO}	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
ICBO	$V_{CB}=300V$	100max	μA
IEBO	$V_{EB}=7V$	100max	μA
$V_{(BR)CEO}$	$I_C=10mA$	200min	V
hFE1	$V_{CE}=2V, I_C=2.5A$	10to30	
hFE2	$V_{CE}=2V, I_C=1mA$	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 _r	$V_{CE}=12V, I_E=-0.5A$	10typ	MHz
COB	$V_{CB}=10V, f=1MHz$	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)

