

: 5 .> // x 4 6 4 ! - } â'ož Silicon NPN transistor in a TO-252 Plastic Package.

+ v v í ä k +) • Ä å Š ? 8 â ' Å :-) g&re5.> ^ c ðæ D }

Table 1 / Absolute Maximum Ratings(Ta=25℃ ;)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CBO}	100	V
Collector to Emitter Voltage	V _{CEO}	100	V
Emitter to Base Voltage	V _{EBO}	5.0	V
Collector Current - Continuous	I _C	2.0	A
Collector Current – Continuous(Pulse)	I _{C(Pulse)}	4.0	A
Base Current - Continuous	I _B	50	mA
Collector Power Dissipation	P _C	1.75	W
Collector Power Dissipation	P _C (T _C =25℃)	20	W
Junction Temperature	T _j	150	
Storage Temperature Range	T _{stg}	-55 ~ 150	

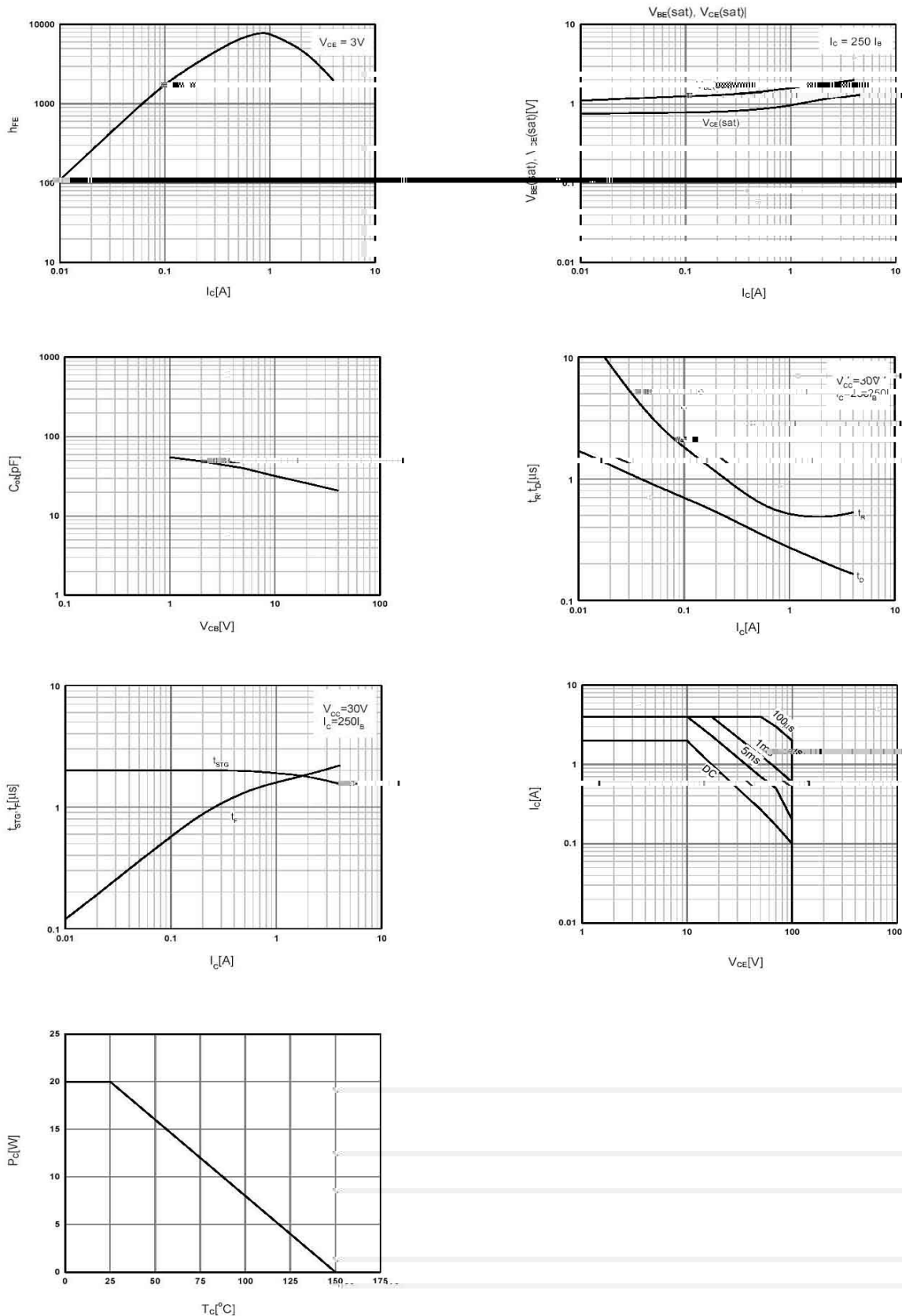
Pulse Test:PW ≤300 μs,Duty Cycle ≤2%

Table 2 / 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	100			V
Collector Cut-Off Current	I _{CEO}	V _{CE} =50V I _B =0			0.02	mA
Collector Cut-Off Current	I _{CBO}	V _{CB} =100V I _E =0			0.02	mA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =5.0V I _C =0			2.0	mA
DC Current Gain	h _{FE(1)} *	V _{CE} =3.0V I _C =2.0A	1000		12K	
	h _{FE(2)} *	V _{CE} =3.0V I _C =0.5A	500			
	h _{FE(3)} *	V _{CE} =3.0V I _C =4.0A	200			
Collector-Emitter Saturation Voltage	V _{CE(sat)1} *	I _C =2.0A I _B =8.0mA			2.0	V
	V _{CE(sat)2} *	I _C =4.0A I _B =40mA			3.0	V
Base-Emitter Saturation Voltage*	V _{BE(sat)} *	I _C =4.0A I _B =40mA			4.0	V
Base-Emitter-On Voltage*	V _{BE(on)} *	V _{CE} =3.0V I _C =2.0A			2.8	V
Current Gain Bandwidth Product	f _T	V _{CE} =10V I _C =0.75A	25			MHz
Output Capacitance	C _{ob}	V _{CB} =10V f=0.1MHz I _E =0			100	pF

*Pulse Test:Pulse Width ≤380us,Duty Cycle ≤2%. Test Conditions: V_{CE}=5V, I_B=I_C/10

Electrical Characteristic Curve



Symbol		Symbol	
Max	Min	Max	Min
6.25	3.30	2.40	5.95
0.50	0.90	4.43	4.73
0.45	0.55	9.45	9.95
0.25	0.35	0.25	0.35
0.60	0.70	0.25	0.35
5.16	5.56	0.00	0.00

4 / 6

