2SC3519/3519A

(Ta=25°C)

Silicon NPN Epitaxial Planar Transistor (Complement to type 2SA1386/A)

■Absolute maximum ratings (Ta=25°C)

2SC3519 2SC3519A 180 VCBO 160 V VCEO 160 180 ٧ Vebo V Ic 15 Α Ιв 4 Α Pc 130(Tc=25°C) W Τj 150 °C Tstg -55 to +150

Electrical Characteristics

				,	
Symbol	Cond	ditions	2SC3519 2SC3519		Unit
ICBO			100	max	μΑ
ICBO		Vcb=	160	180	V
ГЕВО	VEB	=5V	100	μΑ	
V(BR)CEO	Ic=2	25mA	160min	180min	V
hfe	VcE=4\	/, Ic=5A	50		
Vce(sat)	Ic=5A,	IB=0.5A	2.0	V	
fт	VcE=12	V, IE=-2A	50	MHz	
Сов	Vcb=10V	/, f=1MHz	250	pF	

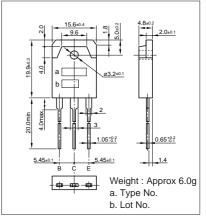
Ō(50 to 100), P(70 to 140), Y(90 to 180) *hff Rank

Typical Switching Characteristics (Common Emitter)

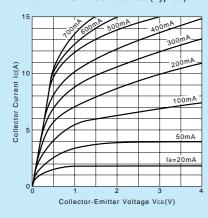
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Vcc (V)	RL (Ω)	Ic (A)	V _{BB1} (V)	VBB2 (V)	IB1 (A)	IB2 (A)	ton (µs)	tstg (µs)	tf (µs)
40	4	10	10	-5	1	-1	0.2typ	1.3typ	0.45typ

Application: Audio and General Purpose

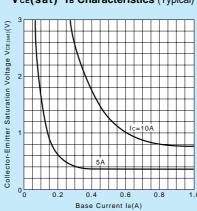




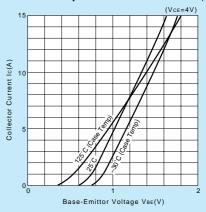
Ic-VcE Characteristics (Typical)



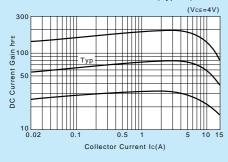
VcE(sat)-IB Characteristics (Typical)



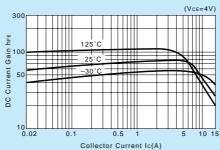
Ic-VBE Temperature Characteristics (Typical)



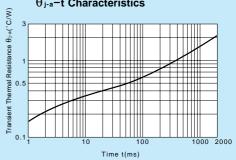
hfe-Ic Characteristics (Typical)



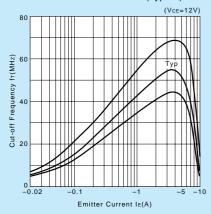
hfe-Ic Temperature Characteristics (Typical)



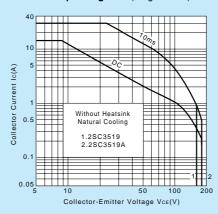
 $\theta_{\text{j-a}}\text{--t Characteristics}$



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

