

2SC4706

Silicon NPN Triple Diffused Planar Transistor (High Voltage Switching Transistor)

Application : Switching Regulator and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	2SC4706	Unit
VCBO	900	V
VCEO	600	V
VEBO	7	V
IC	14(Pulse28)	A
IB	7	A
PC	130(Tc=25°C)	W
Tj	150	°C
Tstg	-55to+150	°C

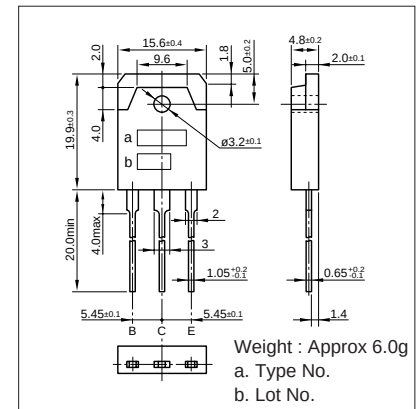
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SC4706	Unit
ICBO	VCB=800V	100max	μA
IEBO	VEB=7V	100max	μA
V(BR)CEO	IC=10mA	600min	V
hFE	VCE=4V, IC=7A	10to25	
VCE(sat)	IC=7A, IB=1.4A	0.5max	V
VBE(sat)	IC=7A, IB=1.4A	1.2max	V
fr	VCE=12V, IE=-1.5A	6typ	MHz
COB	VCB=10V, f=1MHz	160typ	pF

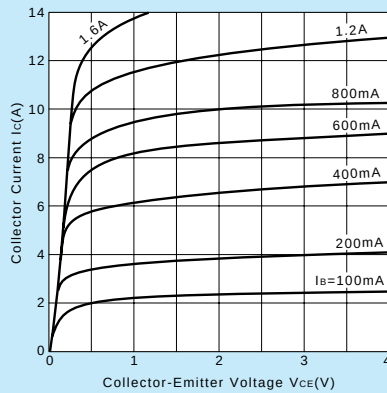
Typical Switching Characteristics (Common Emitter)

VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (A)	IB2 (A)	ton (μs)	tstg (μs)	tf (μs)
250	35.7	7	10	-5	1.05	-3.5	1max	5max	0.7max

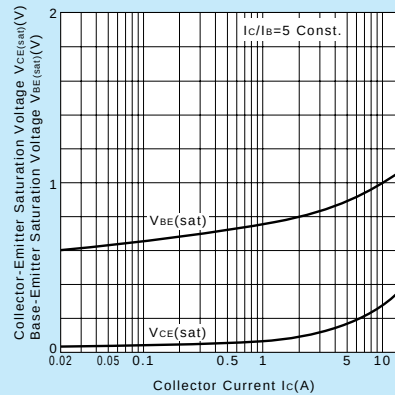
External Dimensions MT-100(TO3P)



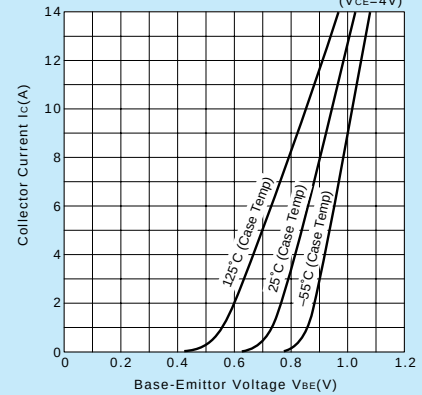
IC-VCE Characteristics (Typical)



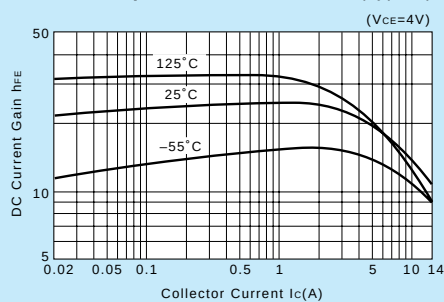
VCE(sat), VBE(sat)-IC Temperature Characteristics (Typical)



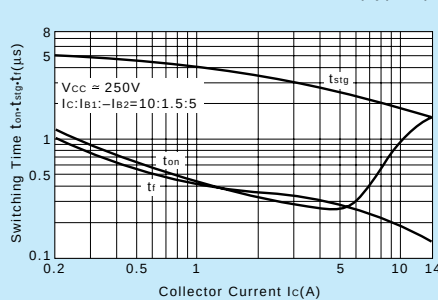
IC-VBE Temperature Characteristics (Typical)



hFE-IC Temperature Characteristics (Typical)

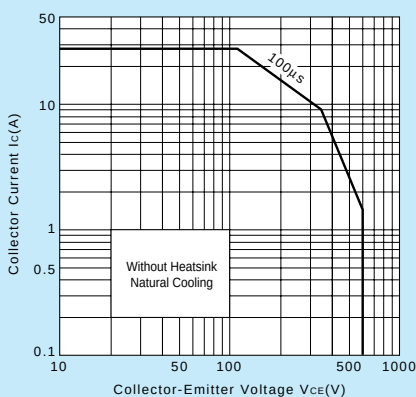


ton•tstg•tf-IC Characteristics (Typical)

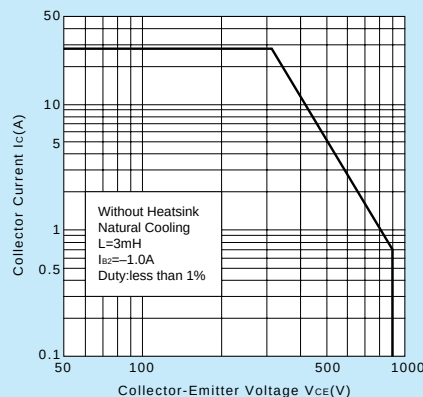


θJA-t Characteristics

Safe Operating Area (Single Pulse)



Reverse Bias Safe Operating Area



PC-Ta Derating

