

# 2SC4518/4518A

Silicon NPN Triple Diffused Planar Transistor (High Voltage Switching Transistor) **Application :** Switching Regulator, Lighting Inverter and General Purpose

**Absolute maximum ratings** (Ta=25°C)

Symbol	Ratings		Unit
	2SC4518	2SC4518A	
VCBO	900	1000	V
VCEO	550		V
VEBO	7		V
IC	5(Pulse10)		A
IB	2.5		A
PC	35(Tc=25°C)		W
TJ	150		°C
Tstg	-55 to +150		°C

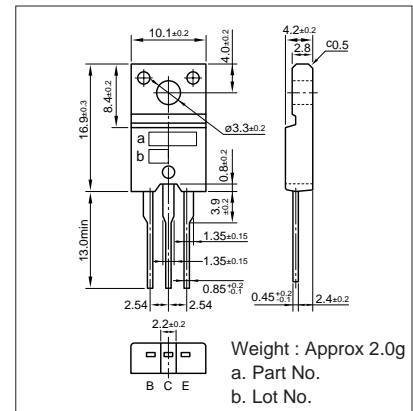
**Electrical Characteristics** (Ta=25°C)

Symbol	Conditions	Ratings		Unit
		2SC4518	2SC4518A	
ICBO	VCB=800V	100max		μA
IEBO	VEB=7V	100max		μA
V(BR)CEO	IC=10mA	550min		V
hFE	VCE=4V, IC=1.8A	10to25		
VCE(sat)	IC=1.8A, IB=0.36A	0.5max		V
VBE(sat)	IC=1.8A, IB=0.36A	1.2max		V
fr	VCE=12V, IE=-0.35A	6typ		MHz
COB	VCB=10V, f=1MHz	50typ		pF

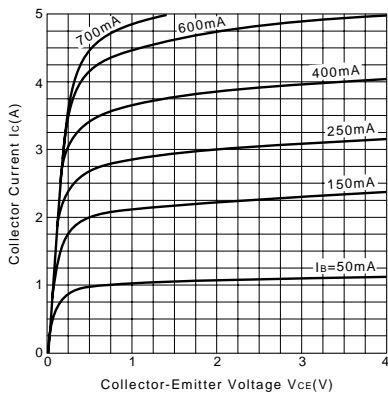
**Typical Switching Characteristics (Common Emitter)**

VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (A)	IB2 (A)	ton (μs)	tstg (μs)	tf (μs)
250	139	1.8	10	-5	0.27	-0.9	0.7max	4max	0.5max

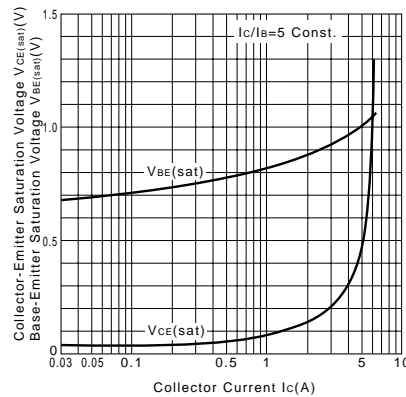
**External Dimensions FM20(TO220F)**



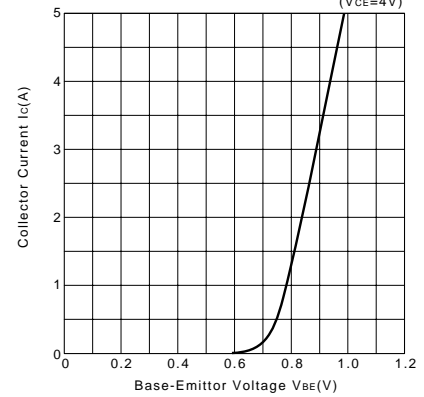
**IC-VCE Characteristics (Typical)**



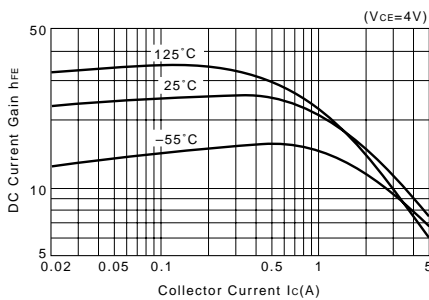
**VCE(sat), VBE(sat)-IC Temperature Characteristics (Typical)**



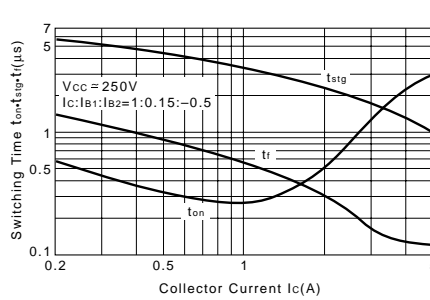
**IC-VBE Temperature Characteristics (Typical)**



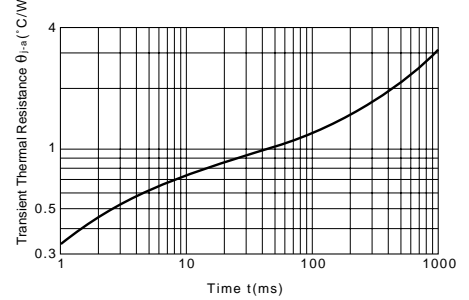
**hFE-IC Temperature Characteristics (Typical)**



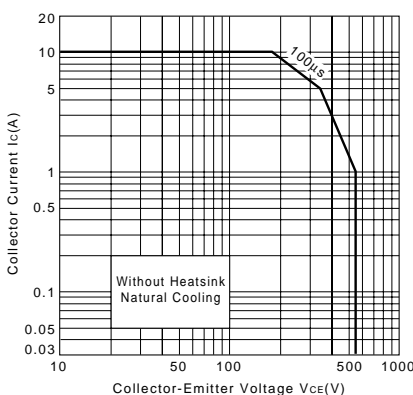
**ton\*tstg\*tr-IC Characteristics (Typical)**



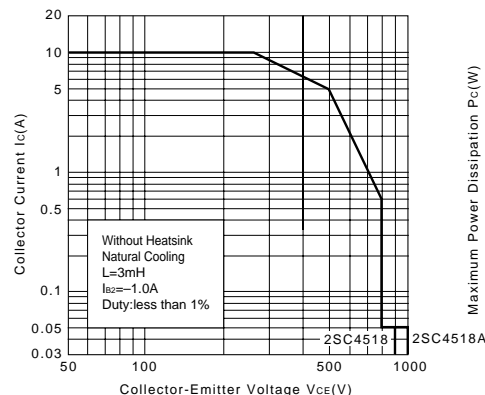
**θj-a-t Characteristics**



**Safe Operating Area (Single Pulse)**



**Reverse Bias Safe Operating Area**



**PC-Ta Derating**

