

2SC4381/4382

Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SA1667/1668)

Application : TV Vertical Output, Audio Output Driver and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	Ratings		Unit
	2SC4381	2SC4382	
VCBO	150	200	V
VCEO	150	200	V
VEBO	6		V
IC	2		A
IB	1		A
PC	25(Tc=25°C)		W
TJ	150		°C
Tstg	-55 to +150		°C

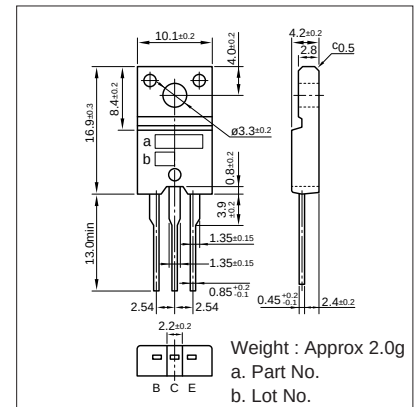
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings		Unit
		2SC4381	2SC4382	
ICBO	VCB=	10max		μA
IEBO	VEB=6V	10max		μA
V(BR)CEO	IC=25mA	150min	200min	V
hFE	VCE=10V, IC=0.7A	60min		
VCE(sat)	IC=0.7A, IB=0.07A	1.0max		V
fT	VCE=12V, IE=-0.2A	15typ		MHz
COB	VCB=10V, f=1MHz	35typ		pF

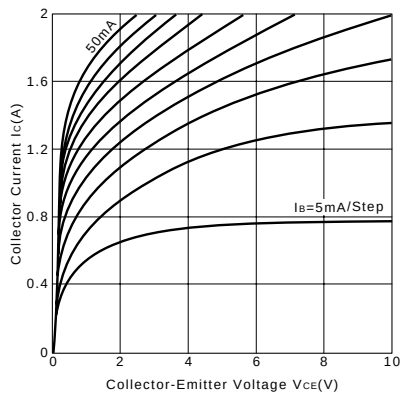
Typical Switching Characteristics (Common Emitter)

VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (mA)	IB2 (mA)	ton (μs)	tstg (μs)	tf (μs)
20	20	1	10	-5	100	-100	1.0typ	3.0typ	1.5typ

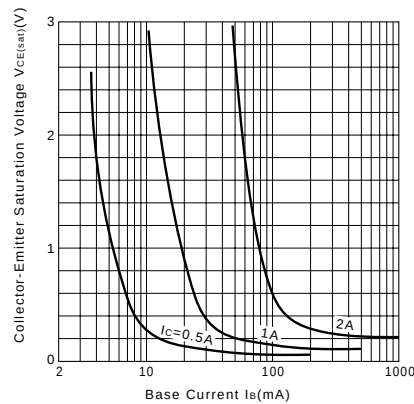
External Dimensions FM20(TO220F)



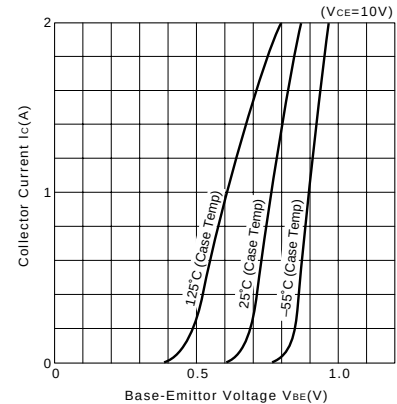
IC-VCE Characteristics (Typical)



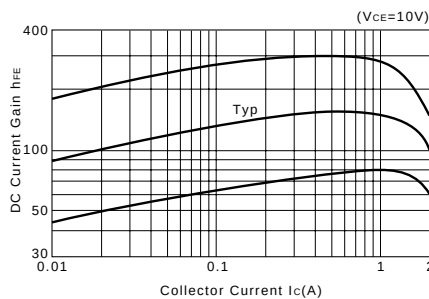
VCE(sat)-IB Characteristics (Typical)



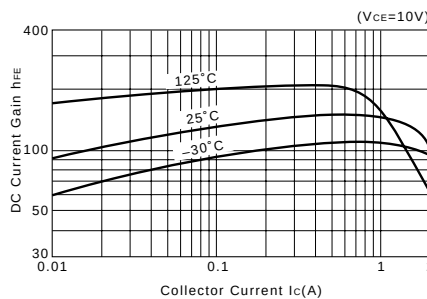
IC-VBE Temperature Characteristics (Typical)



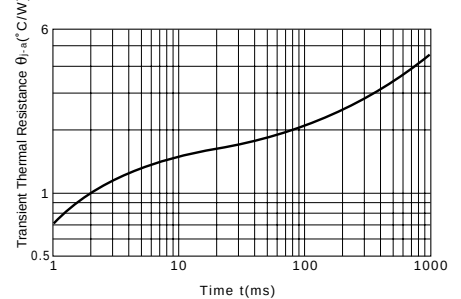
hFE-IC Characteristics (Typical)



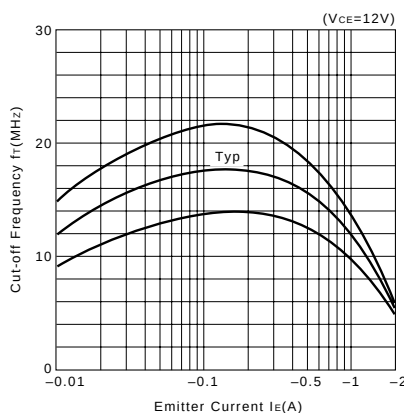
hFE-IC Temperature Characteristics (Typical)



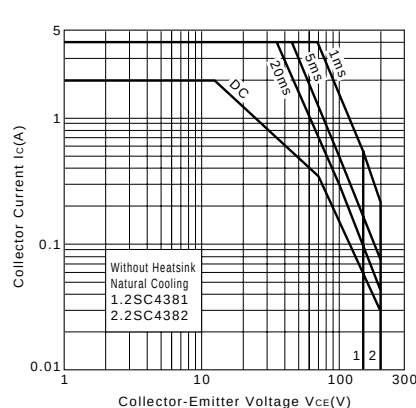
θj-a-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



PC-Ta Derating

