2SC4386

Silicon NPN Triple Diffused Planar T-33-13

☆Complement to type 2SA1671

Application Example:
Audio and General Purpose

●Outline Drawing 5 ·····FM100

Absolute Maximum Ratings (Ta=25°C)

Symbol	2SC4386	Unit
V_{CBO}	160	V
V_{CEO}	120	V
V_{EBO}	6	V
I_C	8	A
I_B	3	A
P_C	75 (T_C=25°C)	W
Tj	150	°C
Tstg	−55~+150	°C

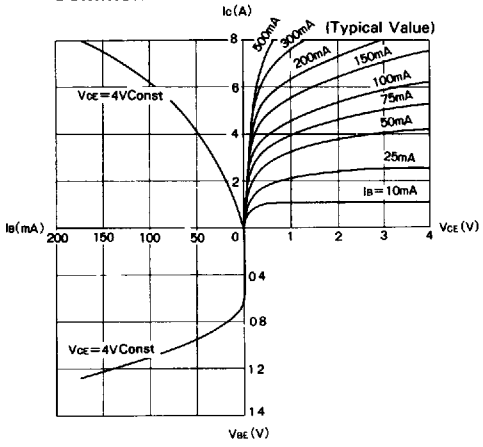
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SC4386	Unit
I_{CBO}	V_{CB}=160V	10max	μA
I_{EBO}	V_{EB}=6V	10max	μA
$V_{(BR)CEO}$	I_C =50mA	120min	V
h_{FE}	V_{CE}=4V, I_C=3A	50min	
$V_{CE(sat)}$	I_C =3A, I_B=0.3A	1.5max	V
f_T	V_{CE}=12V, I_E=−0.5A	20typ	MHz

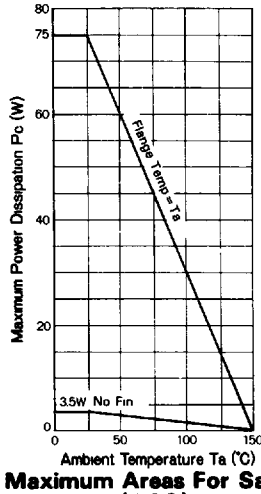
Typical Switching Characteristics (Common Emitter)

V_{CC} (V)	R_L (Ω)	I_C (A)	V_{BB1} (V)	V_{BB2} (V)	I_{B1} (A)	I_{B2} (A)	ton (μs)	tstg (μs)	t_f (μs)
40	10	4	10	−5	0.4	−0.4	0.3typ	3.4typ	0.4typ

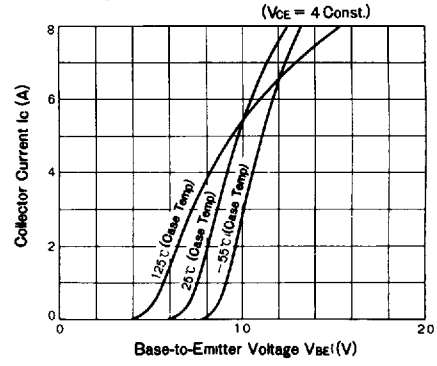
Common Emitter Characteristics



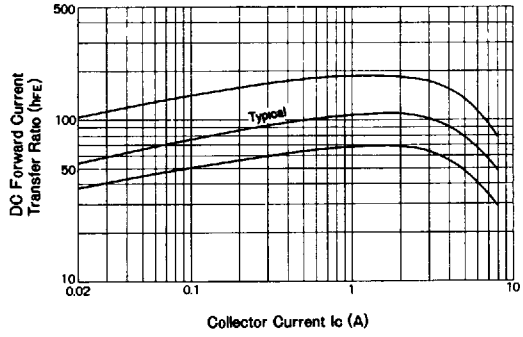
Power Derating



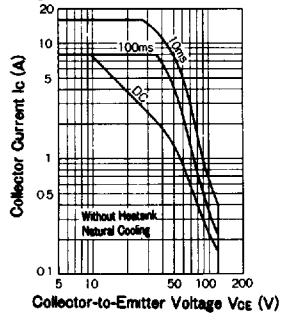
Temperature Characteristics (VCE = 4 Const.)



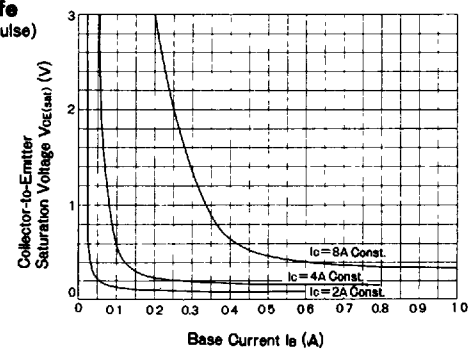
DC Current Gain Characteristics (VCE = 4V Const.)



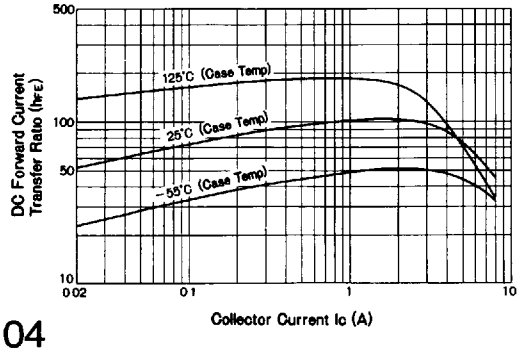
Maximum Areas For Safe Operation (ASO) (Single Pulse)



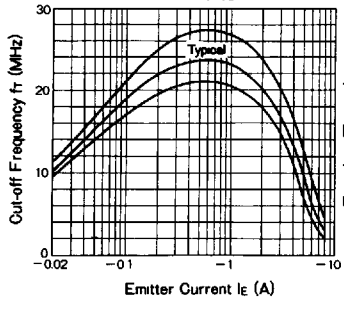
VCE(sat)−IB Characteristics (Typical Value)



DC Current Gain Temperature Characteristics (VCE = 4V Const.)



Frequency Characteristics (VCE = 12V Const.)



Transient Thermal Resistance Characteristics