

2SC3853

Silicon NPN Triple Diffused Planar
 ☆ Complement to type 2SA1489

T-33-11

Application Example : ● Outline Drawing 2.....MT-100(TO3P)
 Audio and General Purpose

Absolute Maximum Ratings (Ta=25°C)

Symbol	2SC3853	Unit
V _{CB0}	120	V
V _{CE0}	80	V
V _{EB0}	6	V
I _C	6	A
I _B	3	A
P _C	60 (T _C = 25°C)	W
T _J	150	°C
T _{stg}	-55~+150	°C

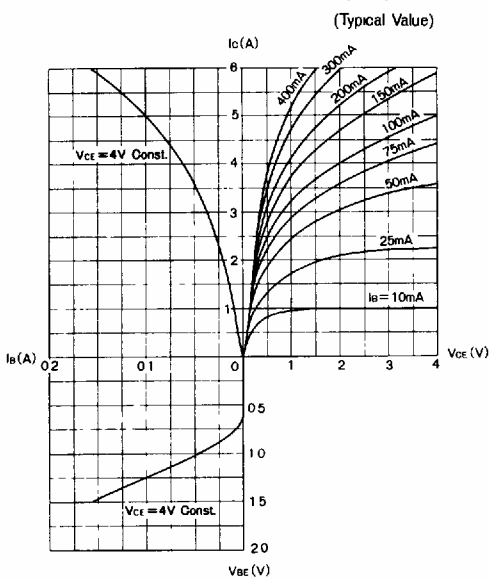
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SC3853	Unit
I _{CB0}	V _{CB} =120V	100max	μA
I _{EB0}	V _{EB} =6V	100max	μA
V _{(BR)CEO}	I _C = 50mA	80min	V
h _{FE}	V _{CE} =4V, I _C =2A	50min	
V _{CE(sat)}	I _C = 2A, I _B =0.2A	1.5max	V
f _T	V _{CE} =12V, I _E =-0.5A	20typ	MHz

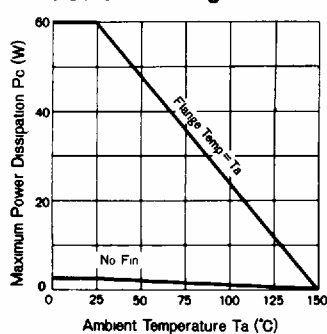
Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BE1} (V)	V _{BE2} (V)	I _{B1} (A)	I _{B2} (A)	t _{on} (μs)	t _{stg} (μs)	t _r (μs)
30	10	3	10	-5	0.3	-0.3	0.5typ	2.5typ	0.6typ

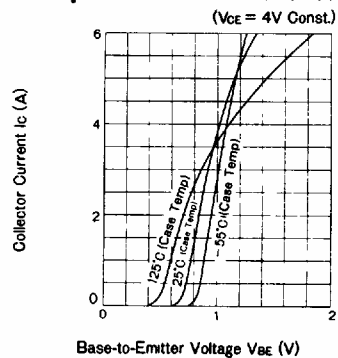
Common Emitter Characteristics



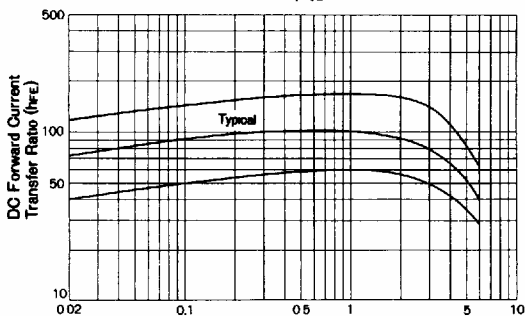
Power Derating



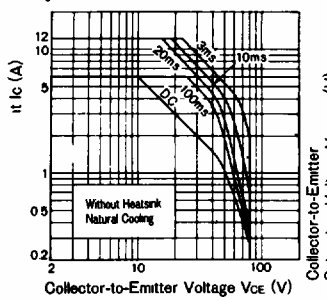
Temperature Characteristics



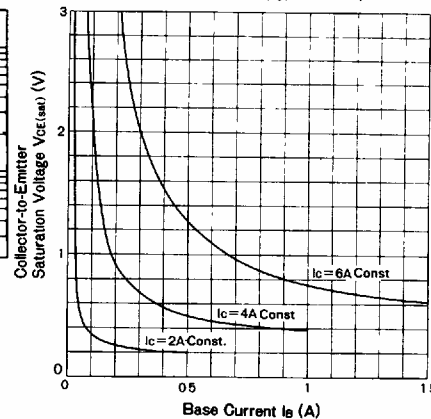
DC Current Gain Characteristics (Vce = 4V Const.)



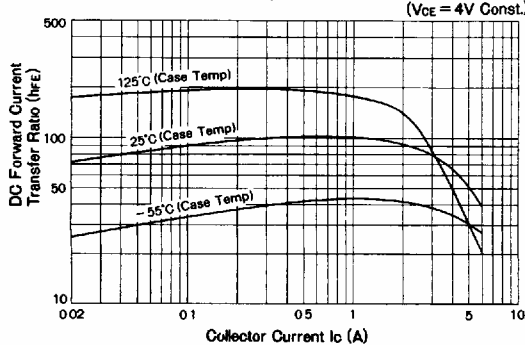
Maximum Areas For Safe Operation (ASO) (Single Pulse)



VCE(sat) - Ib Characteristics (Typical Value)



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



Transient Thermal Resistance Characteristics

