

Silicon NPN Epitaxial Planar Transistor (Complement to type 2SA1303)

Application : Audio and General Purpose

■ Absolute maximum ratings (Ta=25°C)

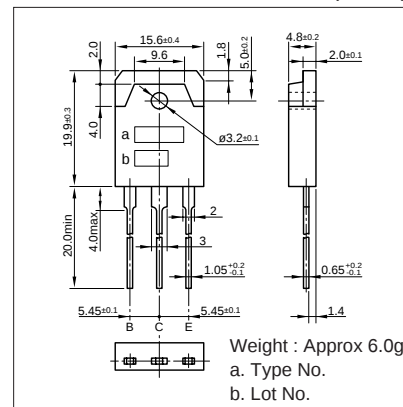
Symbol	2SC3284	Unit
VCBO	150	V
VCEO	150	V
VEBO	5	V
IC	14	A
IB	3	A
Pc	125(Tc=25°C)	W
TJ	150	°C
Tstg	-55 to +150	°C

■ Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SC3284	Unit
ICBO	VCB=150V	100max	μA
IEBO	VEB=5V	100max	μA
V(BR)CEO	IC=25mA	150min	V
hFE	VCE=4V, IC=5A	50min*	
VCE(sat)	IC=5A, IB=0.5A	2.0max	V
fr	VCE=12V, IE=-2A	60typ	MHz
COB	VCB=10V, f=1MHz	200typ	pF

*hFE Rank $\bar{O}$ (50 to 100), P(70 to 140), Y(90 to 180)

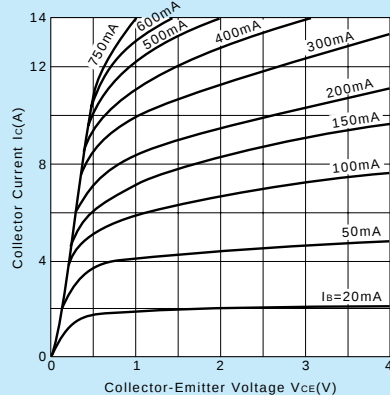
External Dimensions MT-100(TO3P)



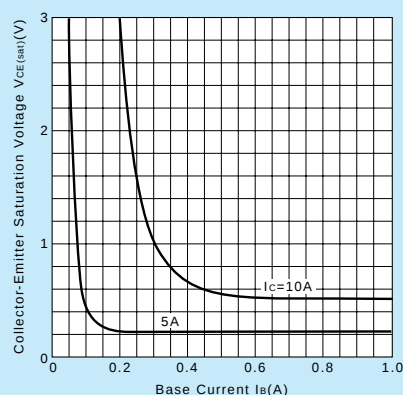
■ Typical Switching Characteristics (Common Emitter)

VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (A)	IB2 (A)	ton (μs)	tstg (μs)	tf (μs)
60	12	5	10	-5	0.5	-0.5	0.2typ	1.5typ	0.35typ

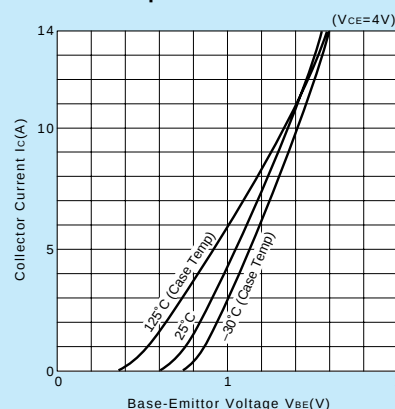
IC-VCE Characteristics (Typical)



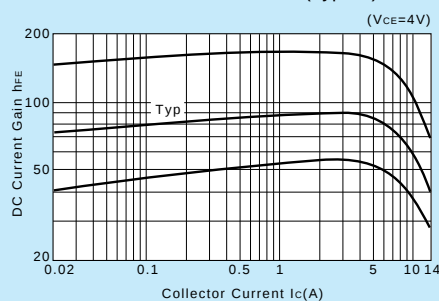
VCE(sat)-IB Characteristics (Typical)



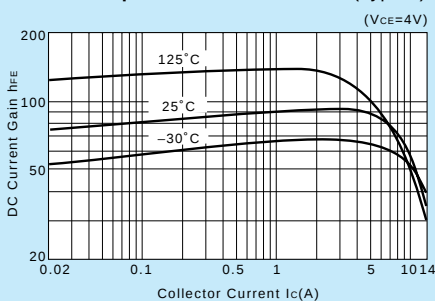
IC-VBE Temperature Characteristics (Typical)



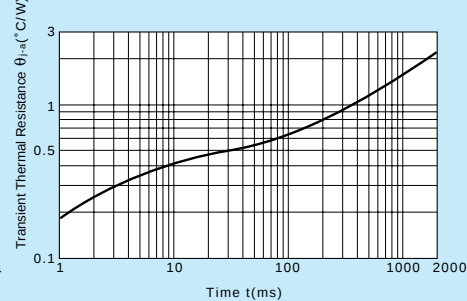
hFE-IC Characteristics (Typical)



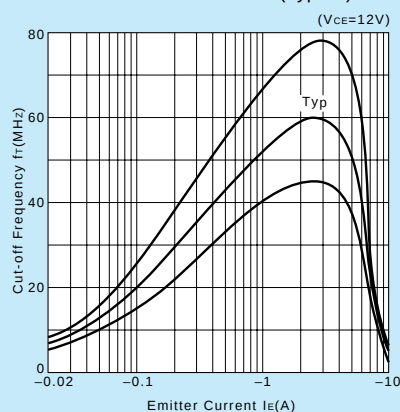
hFE-IC Temperature Characteristics (Typical)



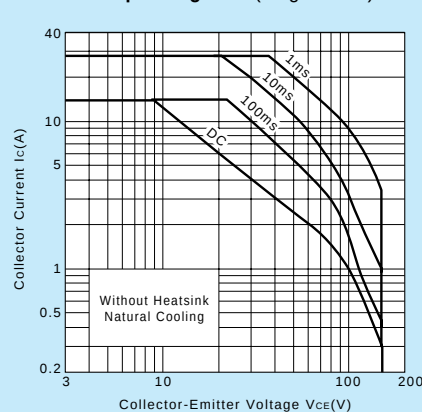
θJA-t Characteristics



fr-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

