

Silicon NPN Epitaxial Planar Transistor (Complement to type 2SA1186)

Application : Audio and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	2SC2837	Unit
VCBO	150	V
VCEO	150	V
VEBO	5	V
IC	10	A
IB	2	A
Pc	100(Tc=25°C)	W
Tj	150	°C
Tstg	-55 to +150	°C

■ Electrical Characteristics (Ta=25°C)

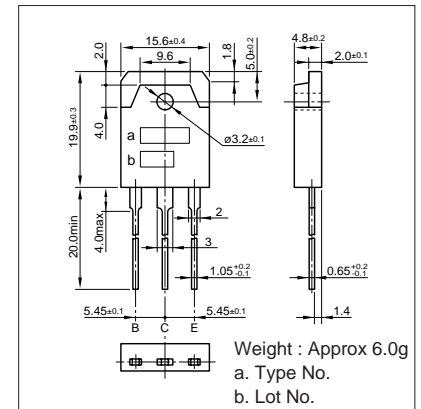
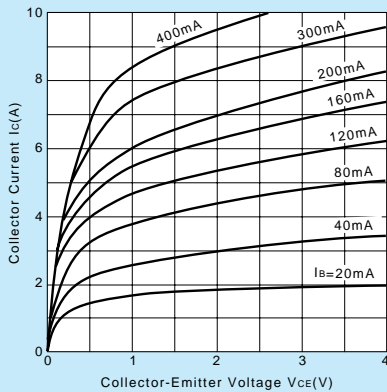
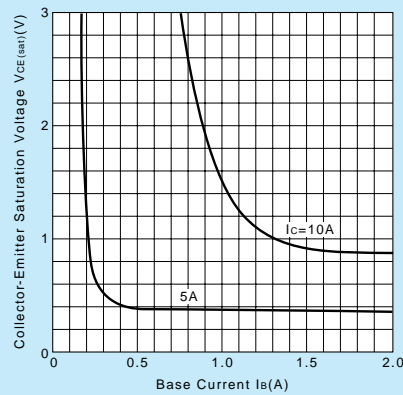
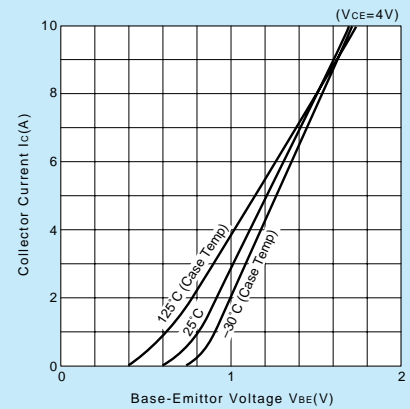
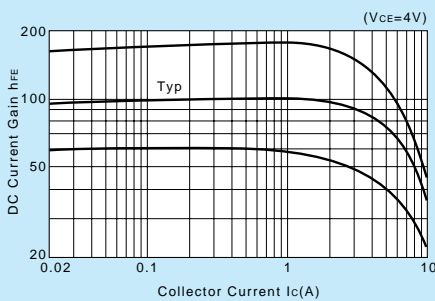
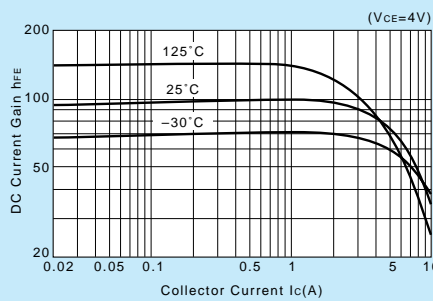
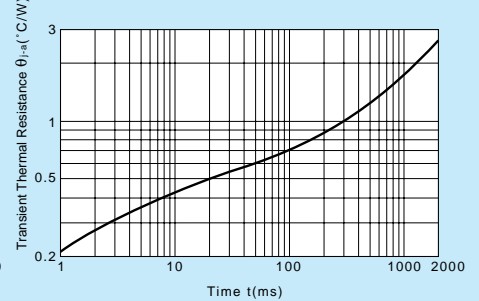
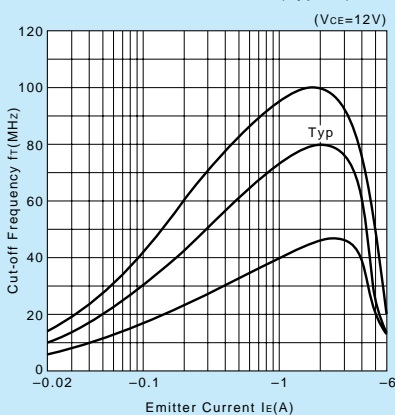
Symbol	Conditions	2SC2837	Unit
ICBO	VCB=150V	100max	μA
IEBO	VEB=5V	100max	μA
V(BR)CEO	IC=25mA	150min	V
hFE	VCE=4V, IC=3V	50min*	
VCE(sat)	IC=5A, IB=0.5A	2.0max	V
f _r	VCE=12V, IE=-1A	70typ	MHz
COB	VCB=80V, f=1MHz	60typ	pF

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

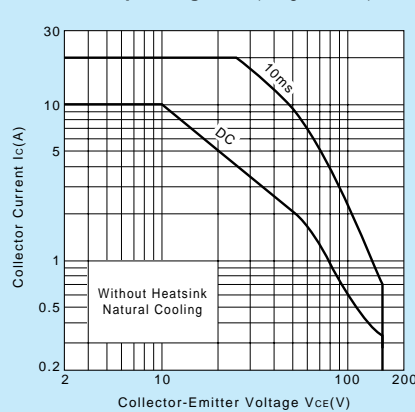
■ Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{B2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
60	12	5	-5	500	-500	0.2typ	1.4typ	0.35typ

External Dimensions MT-100(TO3P)

I_C-V_{CE} Characteristics (Typical)V_{CE(sat)}-I_B Characteristics (Typical)I_C-V_{BE} Temperature Characteristics (Typical)h_{FE}-I_C Characteristics (Typical)h_{FE}-I_C Temperature Characteristics (Typical)θ_{J-a}-t Characteristicsf_T-I_E Characteristics (Typical)

Safe Operating Area (Single Pulse)

P_c-T_a Derating