Low Vce (sat)

2SA1746

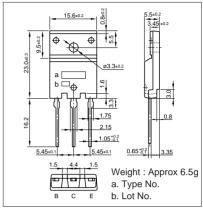
Silicon PNP Epitaxial Planar Transistor

Application: Chopper Regulator, Switch and General Purpose

Absolute maximum ratings (Ta=25°C)							
Symbol	2SA1746	Unit					
Vсво	-70	V					
VCEO	-50	V					
VEBO	-6	V					
Ic	-12(Pulse-20)	А					
Ів	-4	А					
Pc	60(Tc=25°C)	W					
Tj	150	°C					
Tstg	-55 to +150	°C					

Electrical Cl	naracteristics	(Ta=25°C)		
Symbol	Conditions	2SA1746	Unit	
Ісво	Vcb=-70V	-10max	μΑ	
І ЕВО	VEB=-6V	-10max	μΑ	
V(BR)CEO	Ic=-25mA	-50min	V	
hfe	Vce=-1V, Ic=-5A	50min		
Vce(sat)	Ic=-5A, IB=-80mA	-0.5max	V	
VBE(sat)	Ic=-5A, IB=-80mA	-1.2max	V	
fr	Vce=-12V, Ie=1A	25typ	MHz	
Сов	VcB=-10V, f=1MHz	400typ	pF	

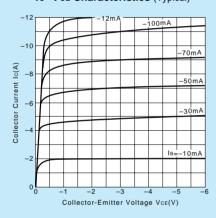
External Dimensions FM100(TO3PF)



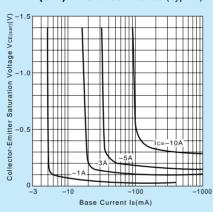
Typical Switching Characteristics (Common Emitter)

Vcc	R _L	Ic	V _{BB1} (V)	V _{BB2}	I _{B1}	I _{B2}	ton	tstg	tf
(V)	(Ω)	(A)		(V)	(mA)	(mA)	(µs)	(µs)	(µs)
-20	4	-5	-10	5	-80	80	0.5typ	0.6typ	0.3typ

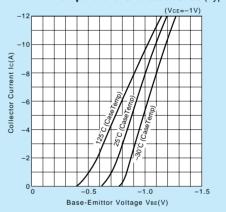
Ic-VcE Characteristics (Typical)



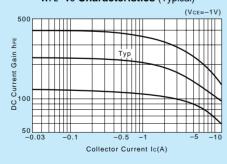
VcE(sat)-IB Characteristics (Typical)



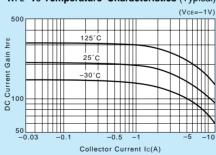
Ic-VBE Temperature Characteristics (Typical)



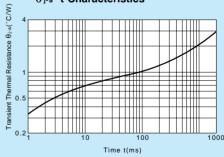
hfe-Ic Characteristics (Typical)



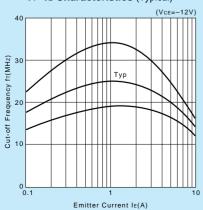
hfe-Ic Temperature Characteristics (Typical)



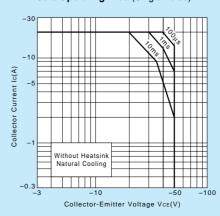
θ_{j-a}-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

