

Silicon Triple Diffused Planar Transistor

T-33-13

2SD917 (NPN)

TOP-3 Package

2SD917 (NPN)

Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	330	V
Collector-Emitter Voltage	V _{CE0}	200	V
Emitter-Base Voltage	V _{EB0}	6	V
Peak Collector Current	I _{CM}	10	A
Collector Current	I _C	7	A
Collector Power Dissipation	P _C *	70	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

*T_c=25°C

High Power TV Deflection

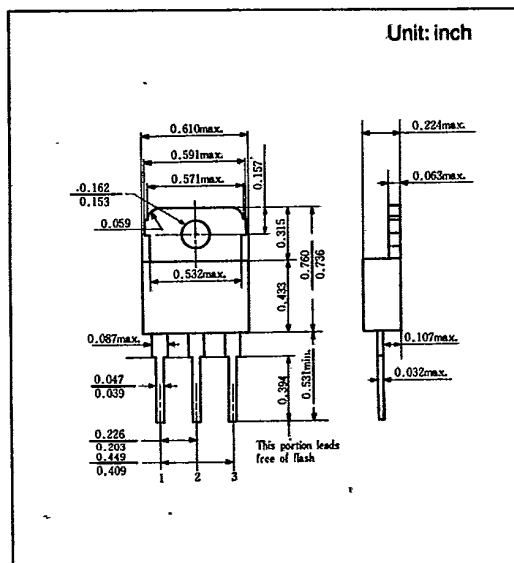
Feature:

- High collector power dissipation: 70W(T_c=25°C)

Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	max.	Unit
Emitter Cutoff Current	I _{EB0}	V _{EB} =6V, I _C =0		1	mA
DC Current Gain	h _{FE}	V _{CE} =4V, I _C =5A	15	45	—
Base Emitter Voltage	V _{BE}	I _C =5A, I _B =0.5A		1.2	V
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =5A, I _B =0.5A		1	V
Gain Bandwidth Product	f _T	I _C =5A, I _B =0.5A		0.75	μS
Emitter-Collector Current, Base Shorted	I _{CES}	V _{CE} =330V, V _{BE} =0		0.1	mA
Emitter-Collector Current, Base Shorted	I _{CES}	V _{CE} =300V, V _{BE} =0, Ta=100°C		1	mA
Thermal Resistance Junction to Ambient	R _{TH}			1.8	°C/W

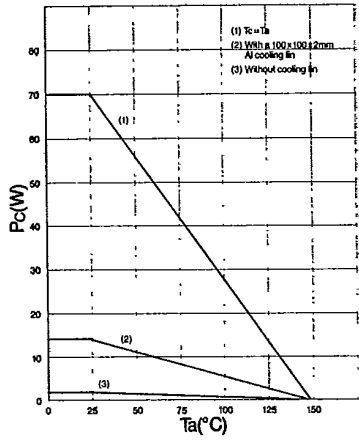
TOP-3 Package Dimensions



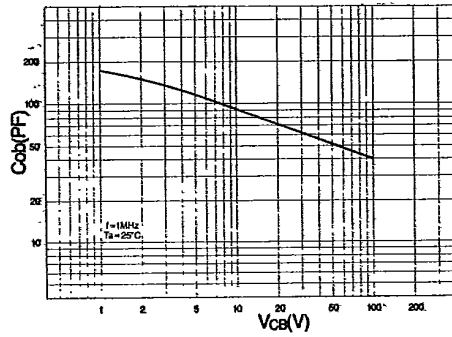
2SD917 (NPN)

Typical Characteristics

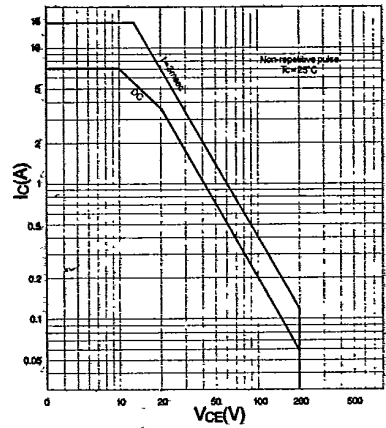
Pc vs. Ta characteristics



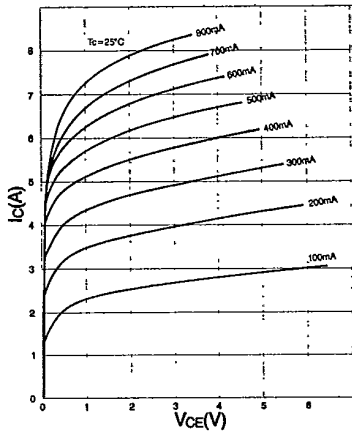
Cob vs. Vcb characteristics



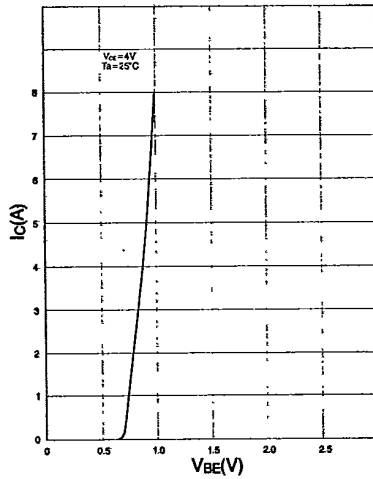
Area of Safe Operation (ASO) ($T_c = 25^\circ\text{C}$)



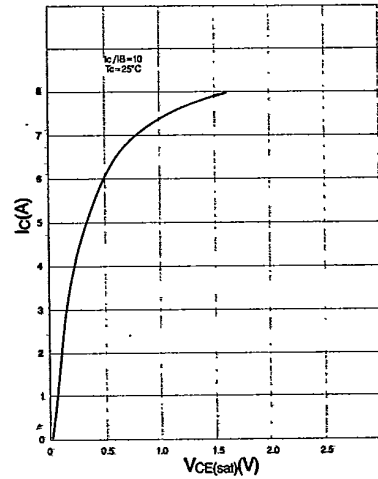
Vce vs. Ic characteristics



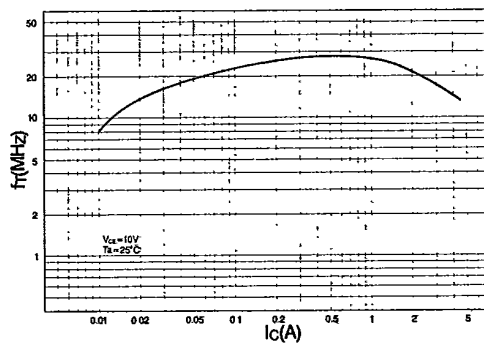
Vbe vs. Ic characteristics



Vce(sat) vs. Ic characteristics



fr vs. Ic characteristics



hFE vs Ic characteristics

