

Ordering number:EN3241

NPN Triple Diffused Planar Silicon Transistor



2SC4449

TV Camera Deflection, High-Voltage Driver Applications

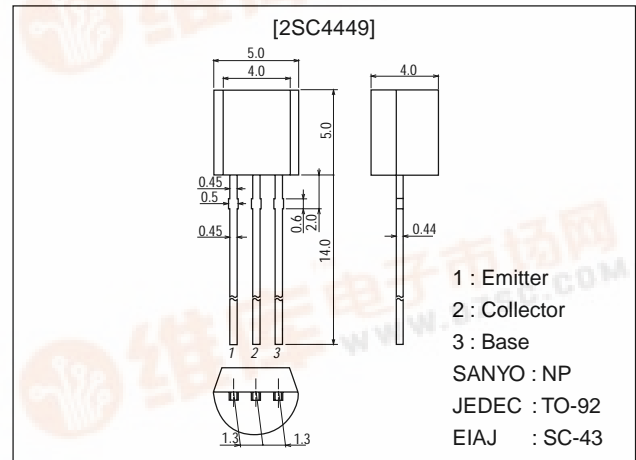
Features

- High breakdown voltage.
- Small reverse transfer capacitance and excellent high frequency characteristic.
- Excellent DC current gain.
- Adoption of FBET process.

Package Dimensions

unit:mm

2003B



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		300	V
Collector-to-Emitter Voltage	V _{CEO}		300	V
Emitter-to-Base Voltage	V _{EBO}		5	V
Collector Current	I _C		50	mA
Collector Current (Pulse)	I _{CP}		100	mA
Collector Dissipation	P _C		600	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CB0}	V _{CB} =200V, I _E =0			0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	μA
DC Current Gain	h _{FE1} h _{FE2}	V _{CE} =6V, I _C =0.1mA	100		320	
		V _{CE} =6V, I _C =1mA	100			
DC Current Gain Ratio	h _{FE} ratio	h _{FE1} /h _{FE2}		0.95		
Gain-Bandwidth Product	f _T	V _{CE} =30V, I _C =10mA		70		MHz

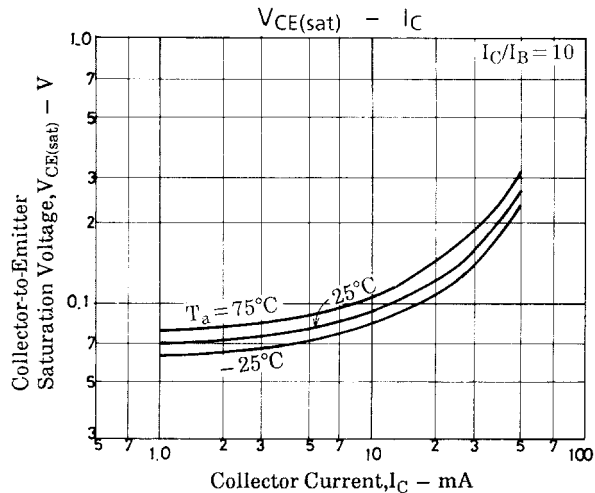
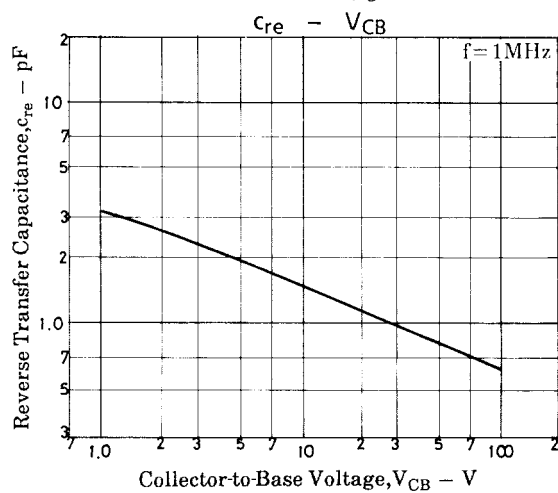
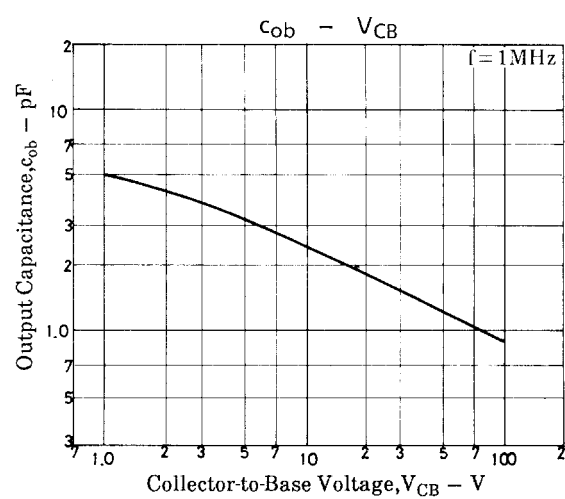
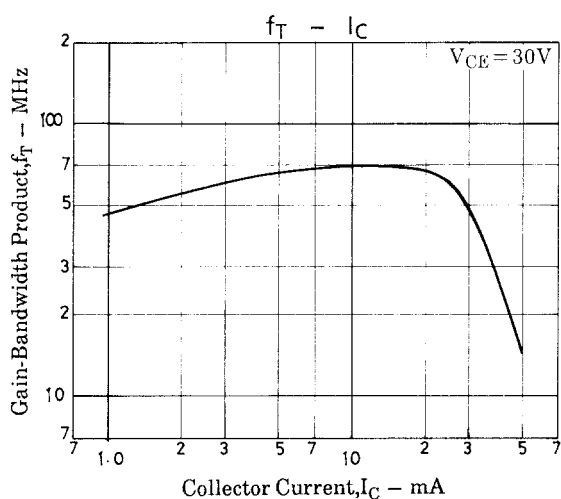
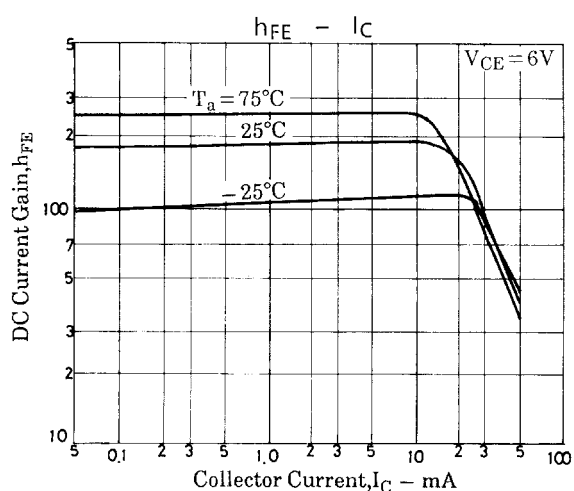
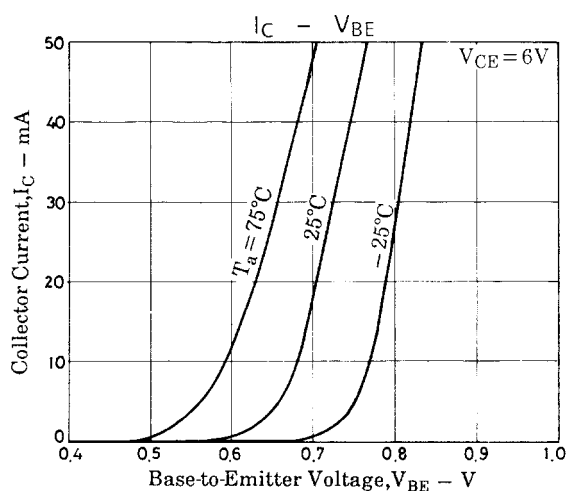
* : The 2SC4449 is classified by 0.1mA h_{FE} as follows :

100	E	200	160	F	320
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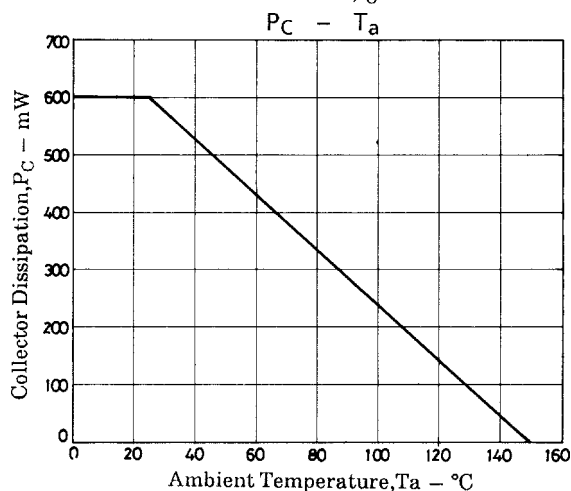
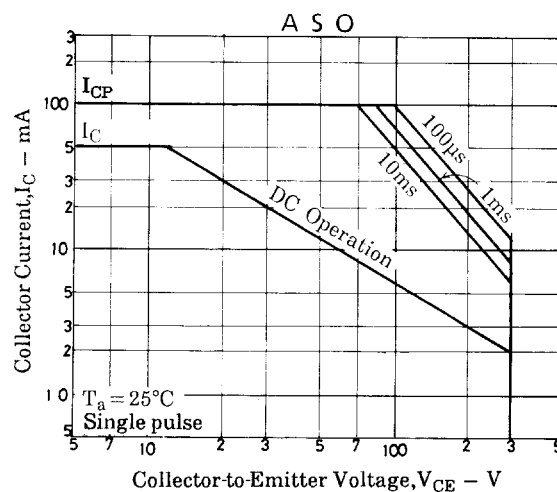
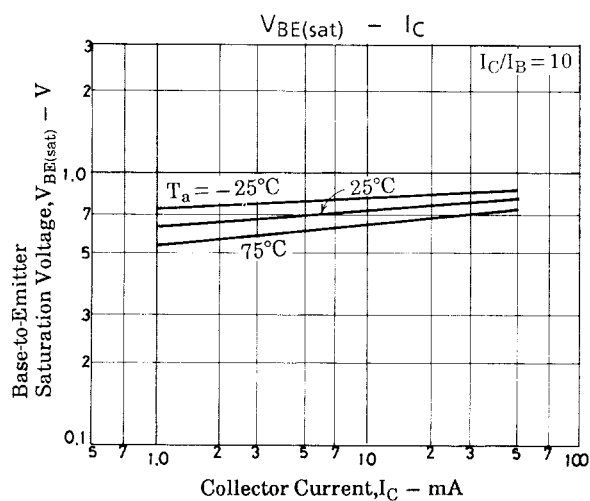
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			1.0	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	300			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, R_{BE}=\infty$	300			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Output Capacitance	C_{ob}	$V_{CB}=30\text{V}, f=1\text{MHz}$		1.5		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=30\text{V}, f=1\text{MHz}$		1.0		pF



2SC4449



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