

**2SC4449**

## TV Camera Deflection, High-Voltage Driver Applications

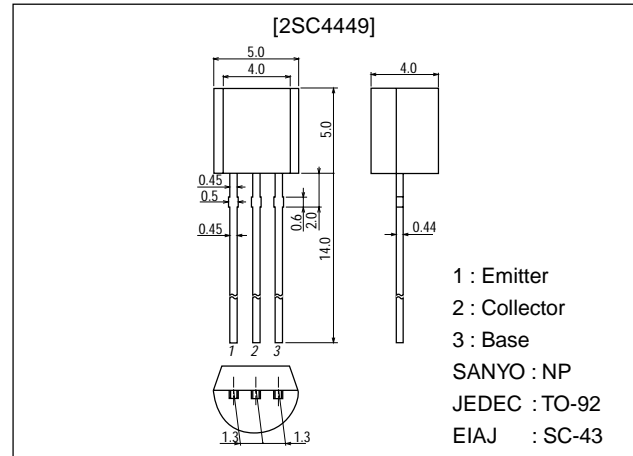
### Features

- 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	$I_{CBO}$	$V_{CB}=200V, I_E=0$			0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE1}$	$V_{CE}=6V, I_C=0.1mA$	100		320	
	$h_{FE2}$	$V_{CE}=6V, I_C=1mA$	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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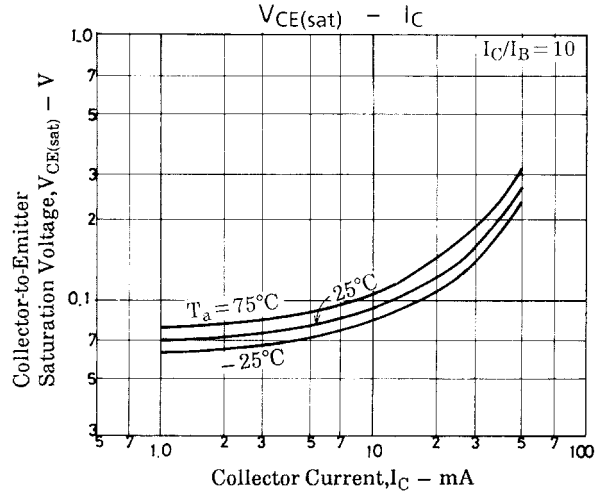
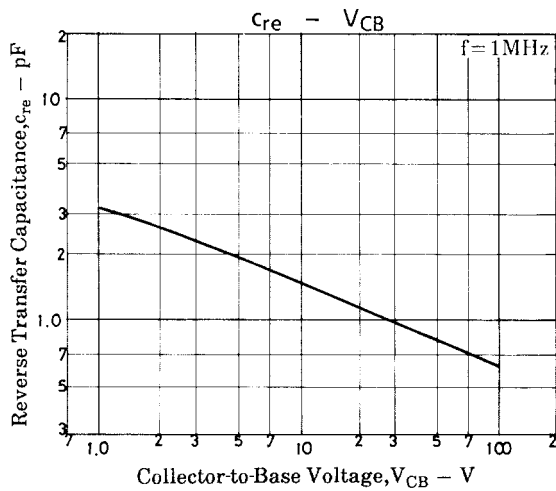
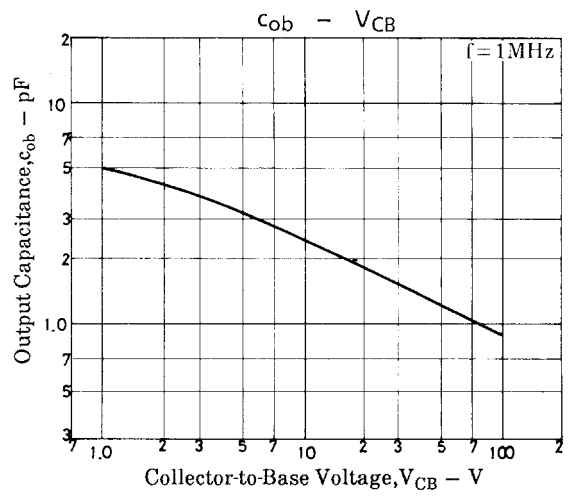
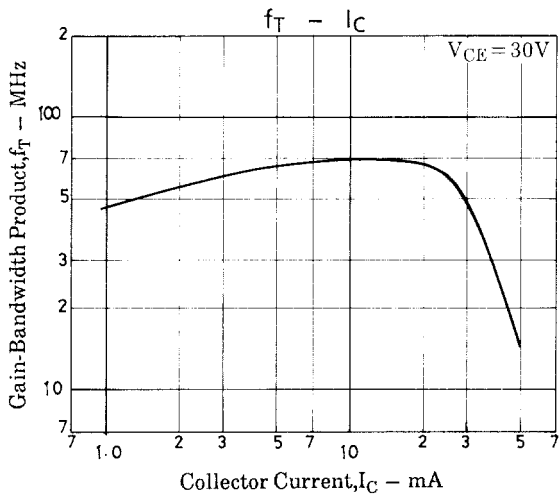
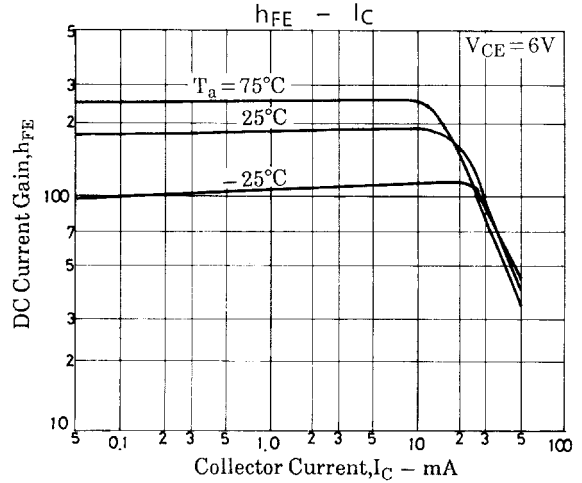
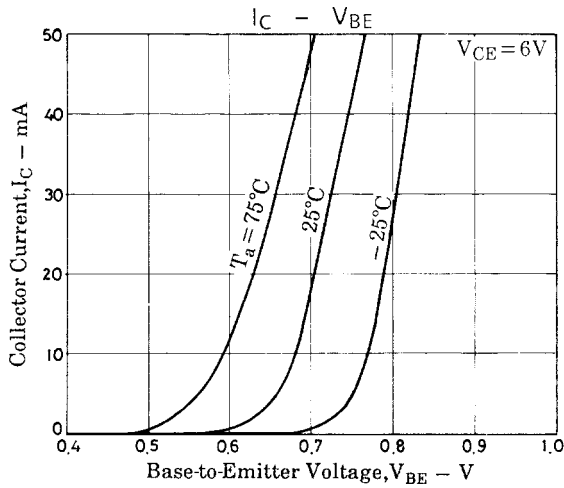
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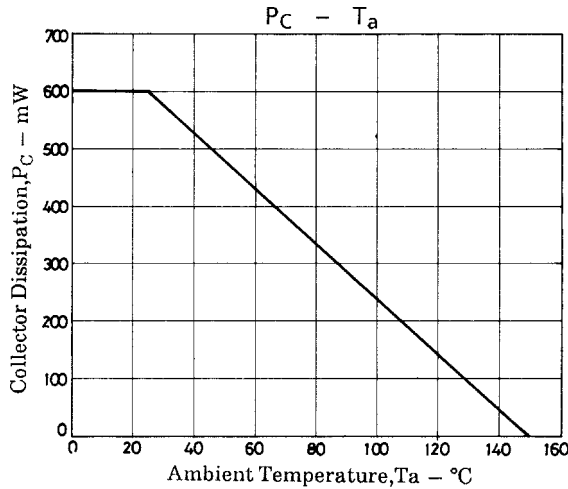
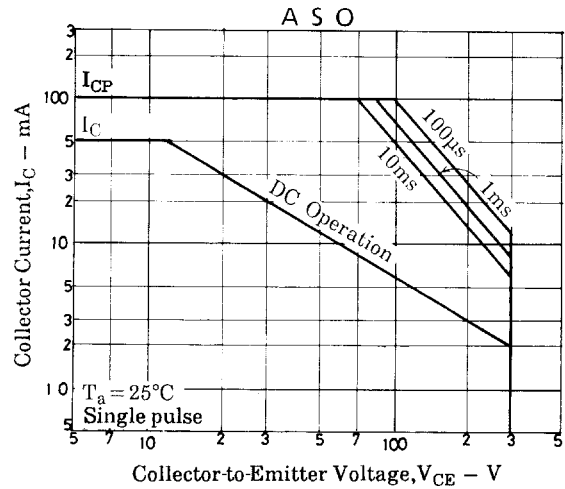
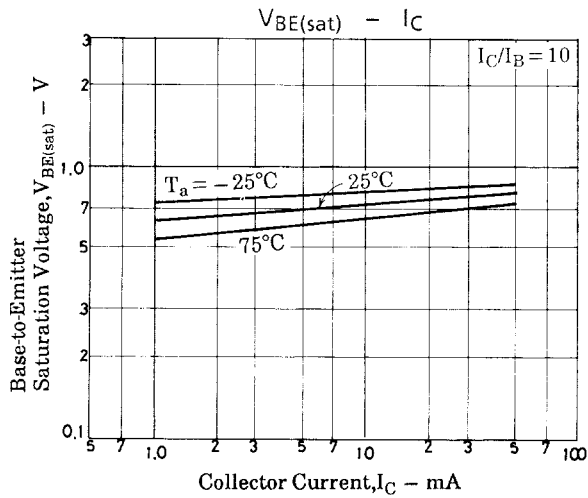
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# 2SC4449

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





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