

**2SC4449**

TV Camera Deflection, High-Voltage Driver Applications

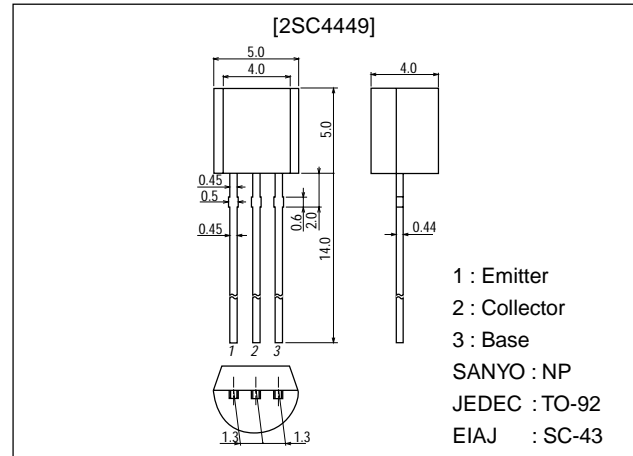
Features

- 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	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
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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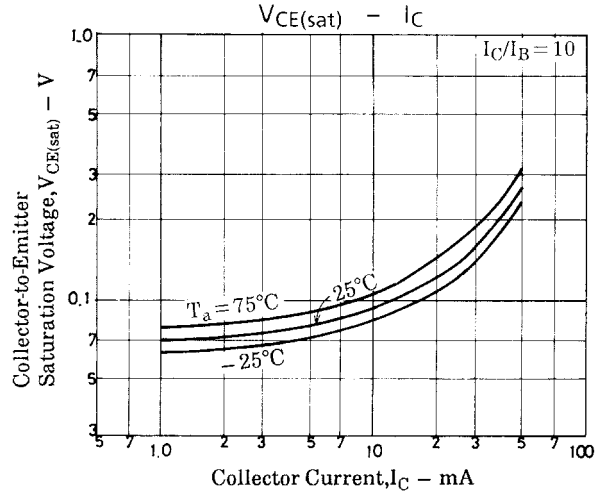
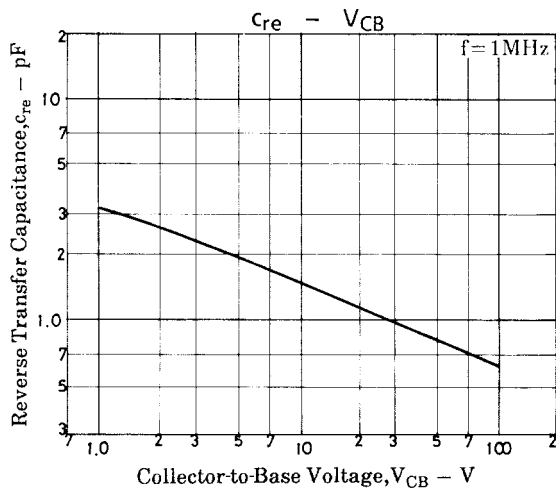
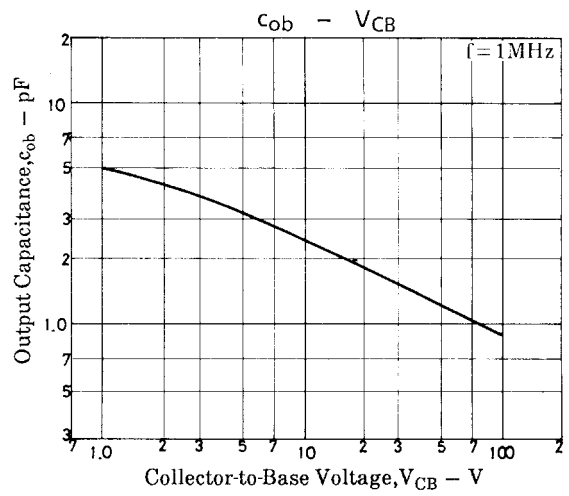
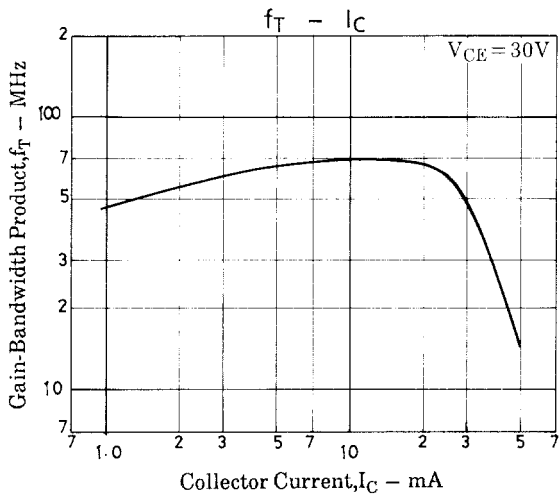
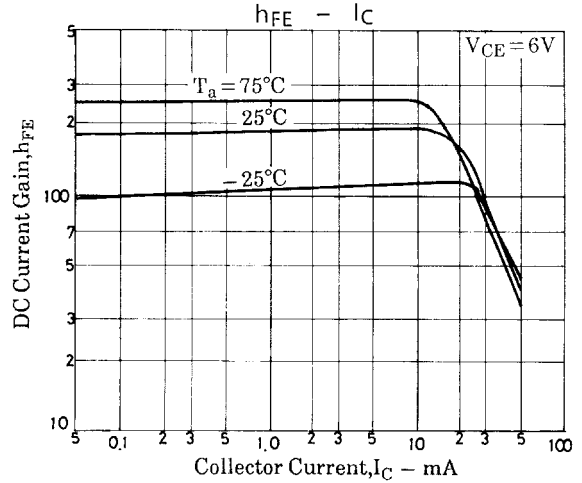
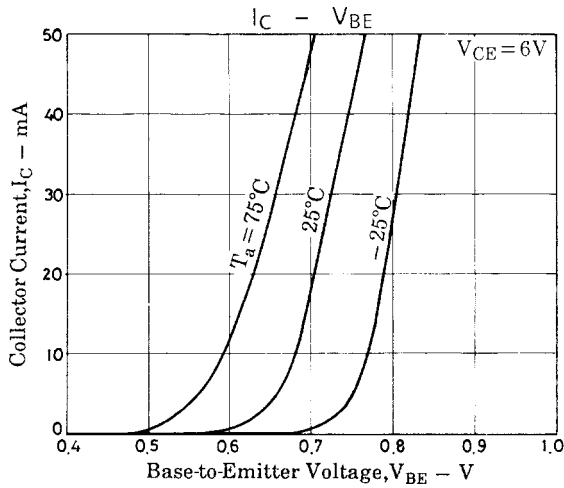
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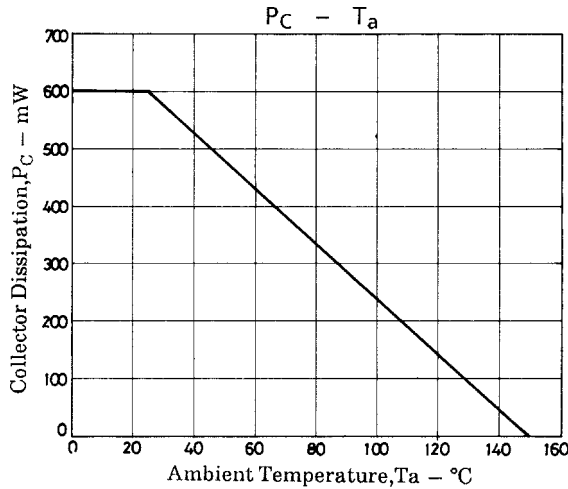
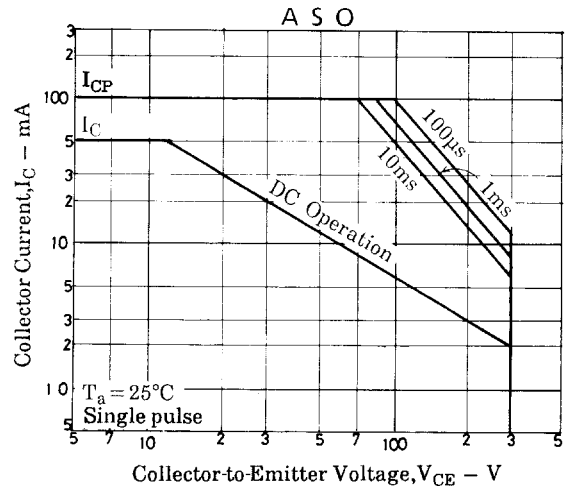
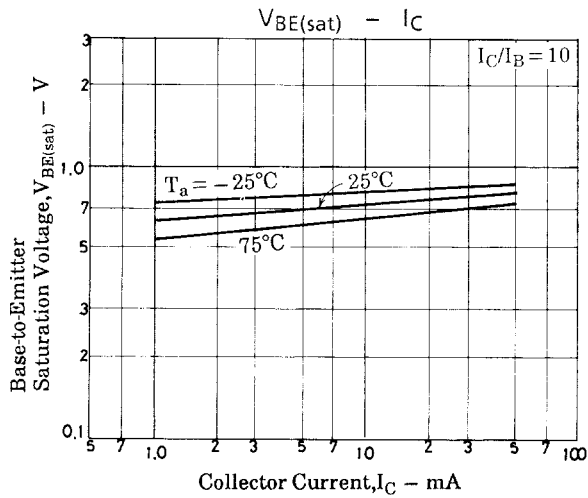
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2SC4449

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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