

**2SC4493**

High-Voltage Amplifier, High-Voltage Switching Applications

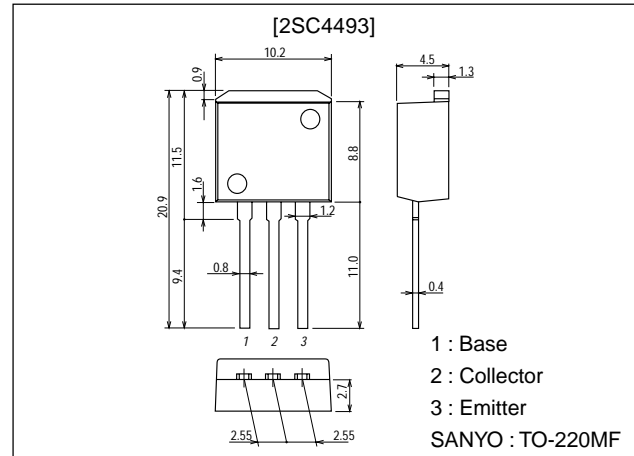
Features

- High breakdown voltage.
- Small C_{ob} .
- High reliability (Adoption of HVP process).
- Intended for high-density mounting (Suitable for sets whose height is restricted).

Package Dimensions

unit:mm

2049C



Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		800	V
Collector-to-Emitter Voltage	V_{CEO}		800	V
Emitter-to-Base Voltage	V_{EBO}		7	V
Collector Current	I_C		20	mA
Collector Current (Pulse)	I_{CP}		60	mA
Collector Dissipation	P_C		1.65	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=800\text{V}, I_E=0$			1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			1	μA
DC Current Gain	h_{FE1}	$V_{CE}=5\text{V}, I_C=2\text{mA}$	20		50	
	h_{FE2}	$V_{CE}=5\text{V}, I_C=10\text{mA}$	10			
Gain-Bandwidth Product	f_T	$V_{CE}=10\text{V}, I_C=2\text{mA}$		40		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=2\text{mA}$			1	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10\text{mA}, I_B=2\text{mA}$			1.5	V

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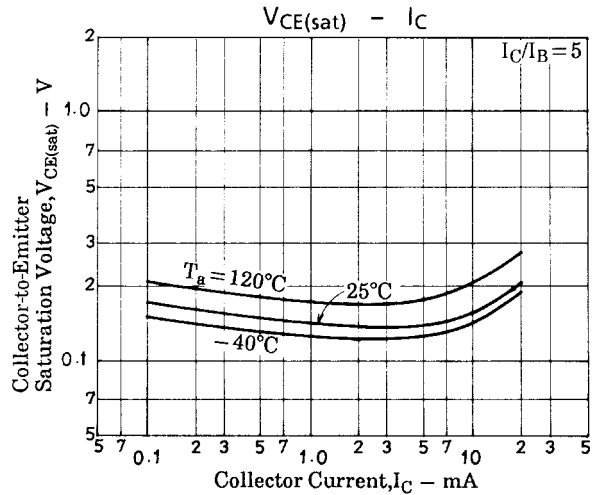
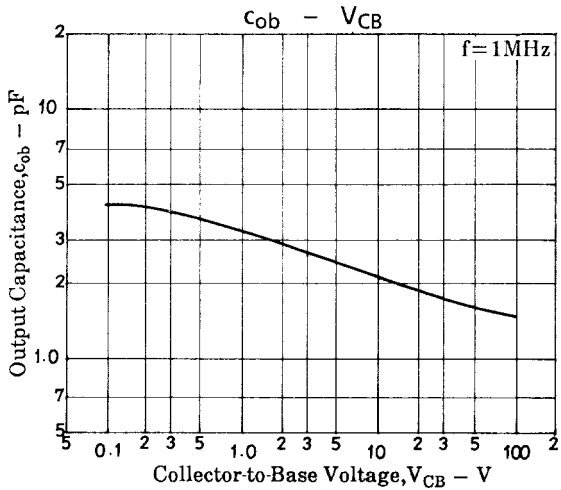
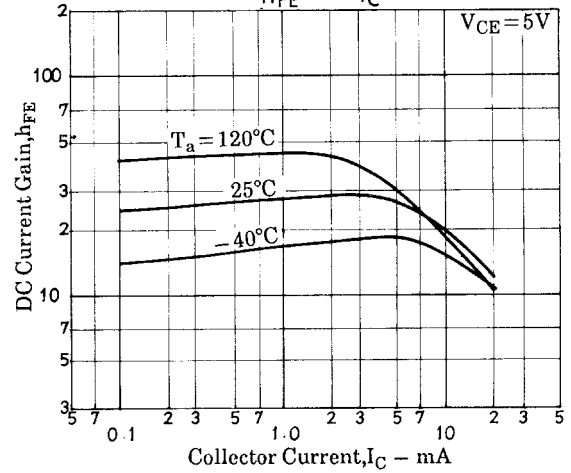
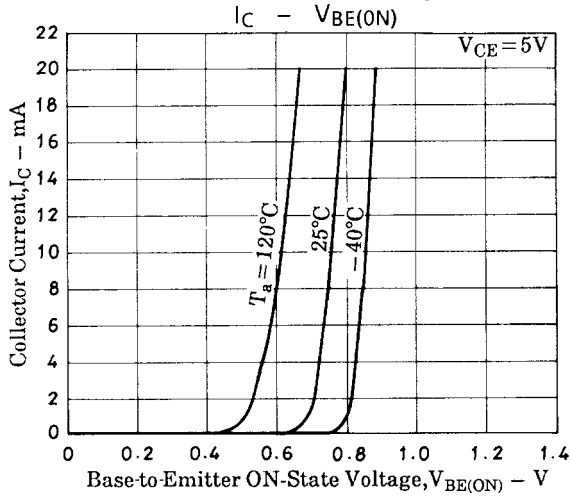
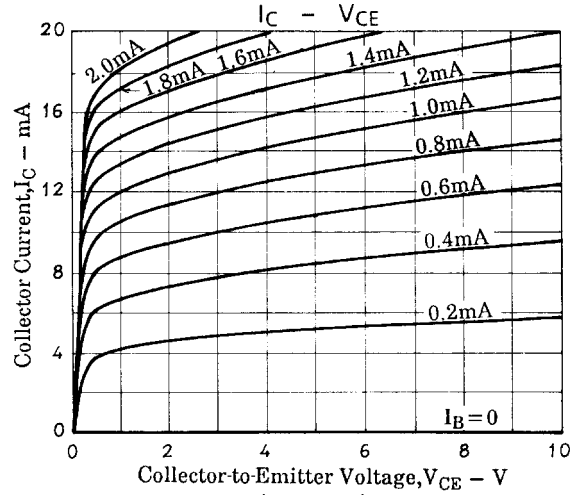
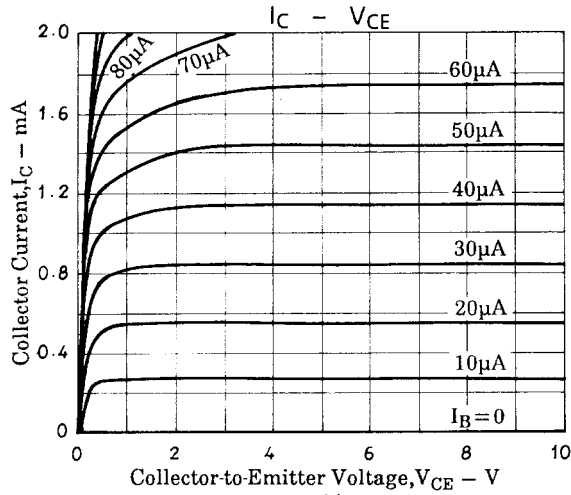
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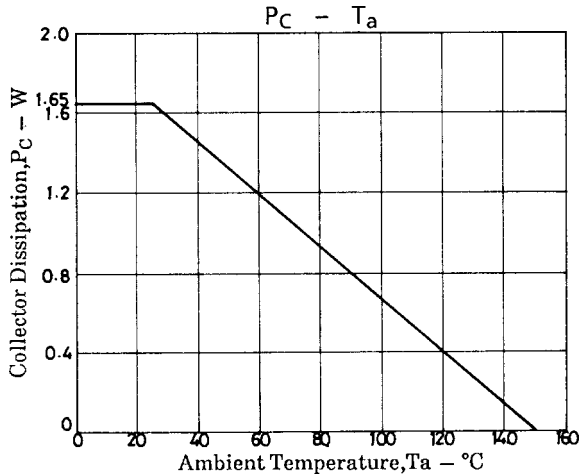
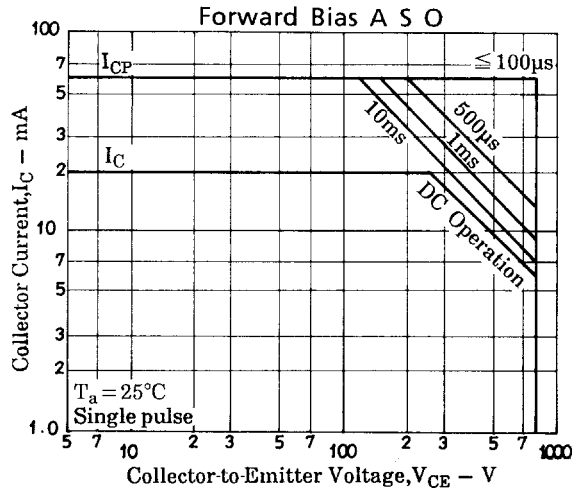
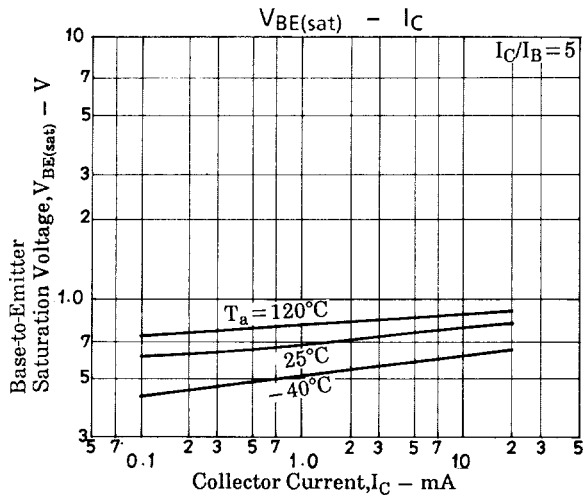
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	800			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	800			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	7			V
Output Capacitance	C_{ob}	$V_{CB}=100V, f=1MHz$		1.6		pF



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