

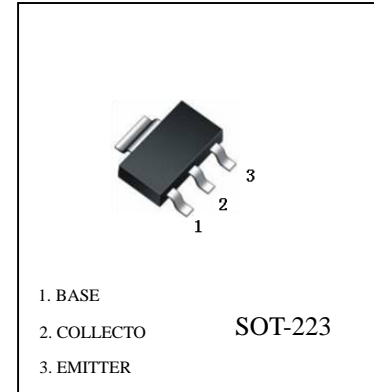
FEATURES

High Voltage Driver Applications

PZTA94 (PNP)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-400	V
Collector-Emitter Voltage	V_{CEO}	-400	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-200	mA
Collector Power Dissipation	I_C	1	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -0.1\text{mA}, I_E = 0$	-400			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1\text{mA}, I_B = 0$	-400			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -400\text{V}, I_E = 0$			-100	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -400\text{V}, I_B = 0$			-5	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	80		300	
	$h_{FE(2)}$	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	70			
	$h_{FE(3)}$	$V_{CE} = -10\text{V}, I_C = -100\text{mA}$	60			
	$h_{FE(4)}$	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$	80			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.2	V
		$I_C = -50\text{mA}, I_B = -5\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.75	V
Transition frequency	f_T	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$ 5	50			MHz

PZTA94 Typical Characteristics

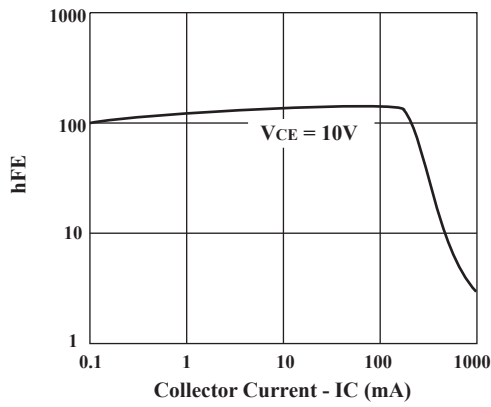


Fig.1 Current Gain & Collector Current

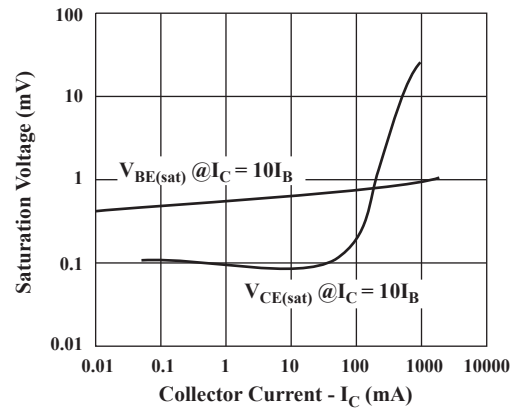


Fig.2 Saturation Voltage & Collector Current

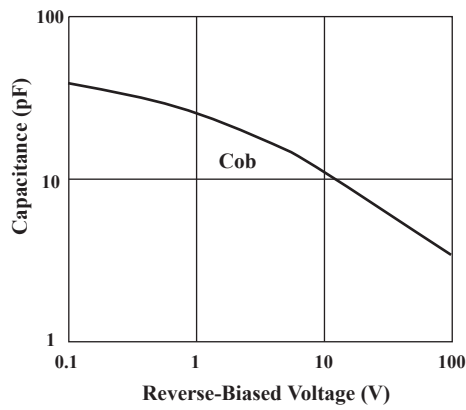


Fig.3 Capacitance & Reverse-Biased Voltage