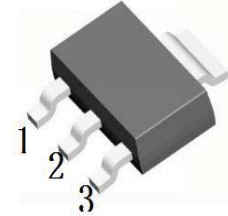


**100V NPN MEDIUM POWER TRANSISTOR**

**SOT-223**



1: Base 2: Collector 3: Emitter

**FEATURES**

1.  $BV_{CEO} > 100V$
2.  $I_C=1A$  High Continuous Current
3. Low saturation voltage

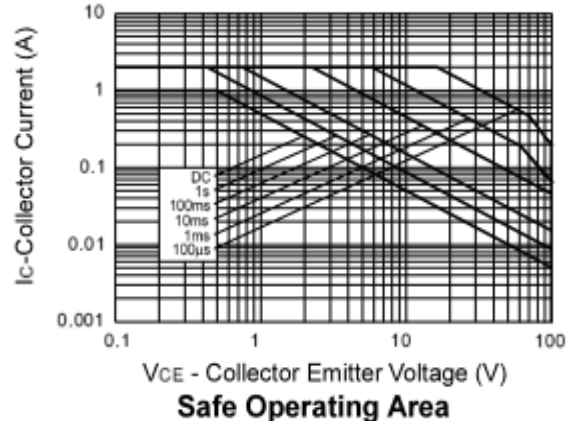
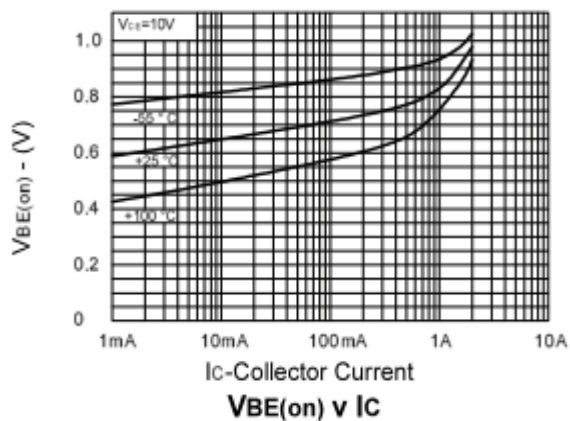
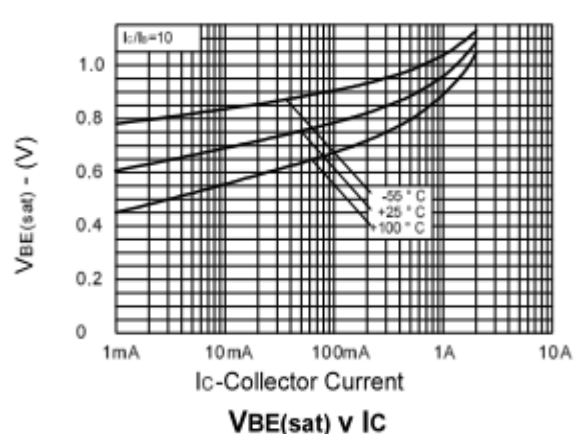
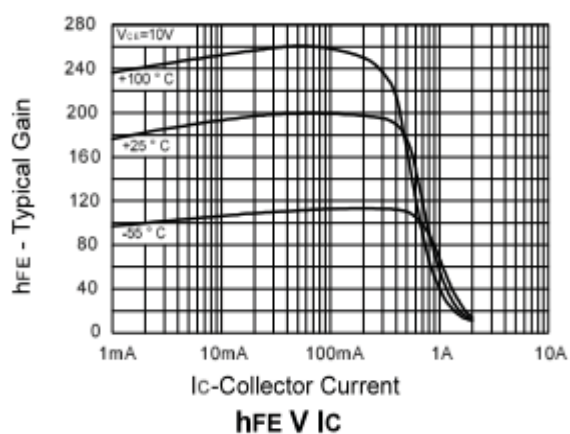
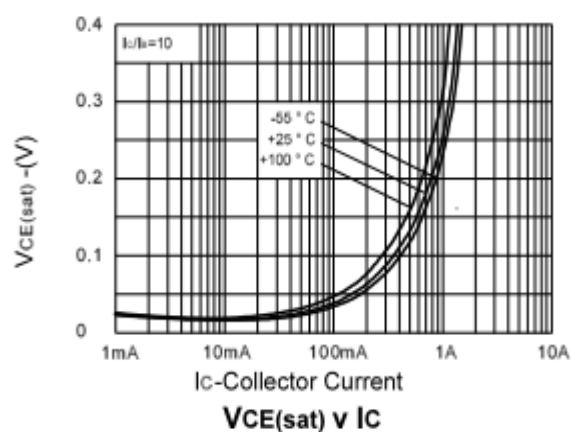
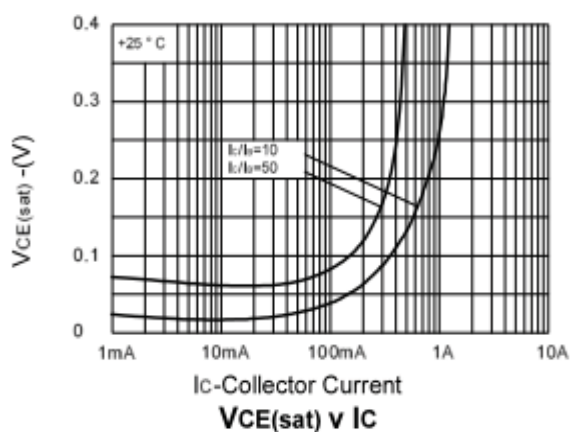
**Maximum ratings( $T_a=25^{\circ}C$  unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	$VC_{BO}$	120	V
Collector-Emitter Breakdown Voltage	$V_{CEO}$	100	V
Emitter-Base Breakdown Voltage	$VE_{BO}$	5	V
Collector Current	$I_C$	1	A
Collector Power Dissipation	$P_C$	2	W
Junction Temperature	$T_J$	150	$^{\circ}C$
Storage Temperature	$T_{stg}$	-55~150	$^{\circ}C$

**Electrical Characteristics ( $T_a=25^{\circ}C$  unless otherwise noted)**

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	$VC_{BO}$	$I_C=100\mu A$ $I_E=0$	120		V
Collector-Emitter Breakdown Voltage	$V_{CEO}$	$I_C=1mA$ $I_B=0$	100		V
Emitter-Base Breakdown Voltage	$VE_{BO}$	$I_E=100\mu A$ $I_C=0$	5		V
Collector-Base Cutoff Current	$IC_{BO}$	$V_{CB}=100V$ $I_E=0$		100	nA
Emitter-Base Cutoff Current	$IE_{BO}$	$V_{EB}=4V$ $I_C=0$		100	nA
Collector-Emitter Cutoff Current	$ICEO$	$V_{CE}=100V$ $I_B=0$		4	$\mu A$
DC Current Gain	HFE	$V_{CE}=10V$ $I_C=1mA$	100		
		$V_{CE}=10V$ $I_C=250mA$	100	300	
		$V_{CE}=10V$ $I_C=500mA$	60		
		$V_{CE}=10V$ $I_C=1A$	20		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.3	V
		$I_C=1A$ $I_B=100mA$		0.6	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A$ $I_B=100mA$		1.15	V
transition frequency	$f_T$	$V_{CE}=10V$ $I_C=50mA$ $f=100MHz$	150		MHz

## RATING AND CHARACTERISTICS CURVES (FZT493)



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