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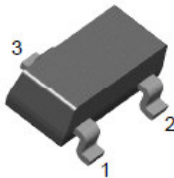
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# FJV92MTF

## PNP Epitaxial Silicon Transistor

### Features

- High Voltage Transistor



**SOT-23**  
1.Base 2.Emmitter 3.Collector

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

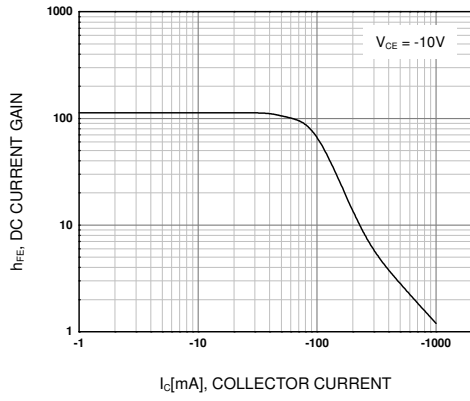
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-350	V
$V_{CEO}$	Collector-Emitter Voltage	-350	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-500	mA
$P_C$	Collector Power Dissipation	350	mW
$T_{STG}$	Storage Temperature	150	$^\circ\text{C}$
$R_{TH(j-a)}$	Thermal Resistance junction to Ambient	357	$^\circ\text{C}/\text{W}$

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

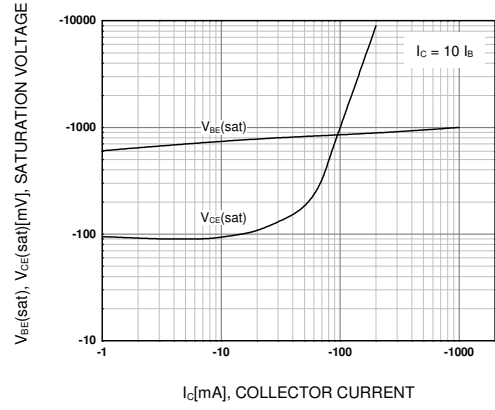
Symbol	Parameter	Test conditions	Min.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = -100\mu\text{A}, I_E = 0$	-350		V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage*	$I_C = -1\text{mA}, I_B = 0$	-350		V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}, I_C = 0$	-5		V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = -200\text{V}, I_E = 0$		-0.25	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = -5\text{V}, I_C = 0$		-0.1	$\mu\text{A}$
$h_{FE}$	DC Current Gain*	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$ $V_{CE} = -10\text{V}, I_C = -10\text{mA}$ $V_{CE} = -10\text{V}, I_C = -30\text{mA}$	25 40 25		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage*	$I_C = -20\text{mA}, I_B = -2\text{mA}$		-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage*	$I_C = -20\text{mA}, I_B = -2\text{mA}$		-0.9	V
$C_{ob}$	Output Capacitance	$V_{CB} = -20\text{V}, I_E = 0, f = 1\text{MHz}$		6	pF
$f_T$	Current Gain Bandwidth Product	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$	50		MHz

\* Pulse Test:  $PW \leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$

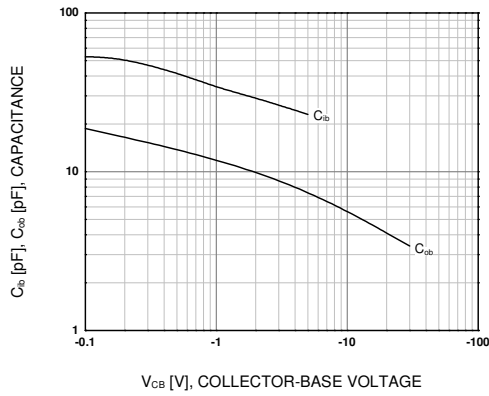
## Typical Characteristics



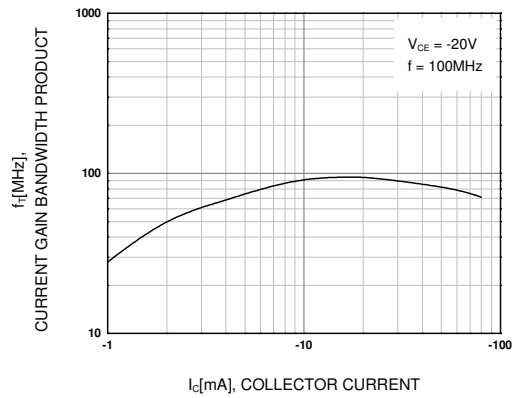
**Figure 1. DC current Gain**



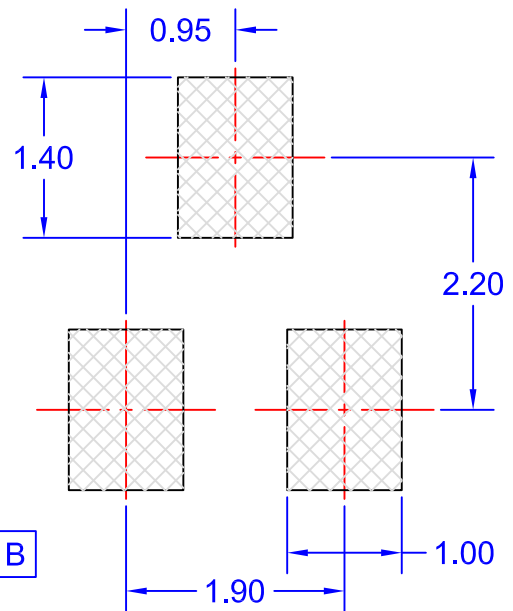
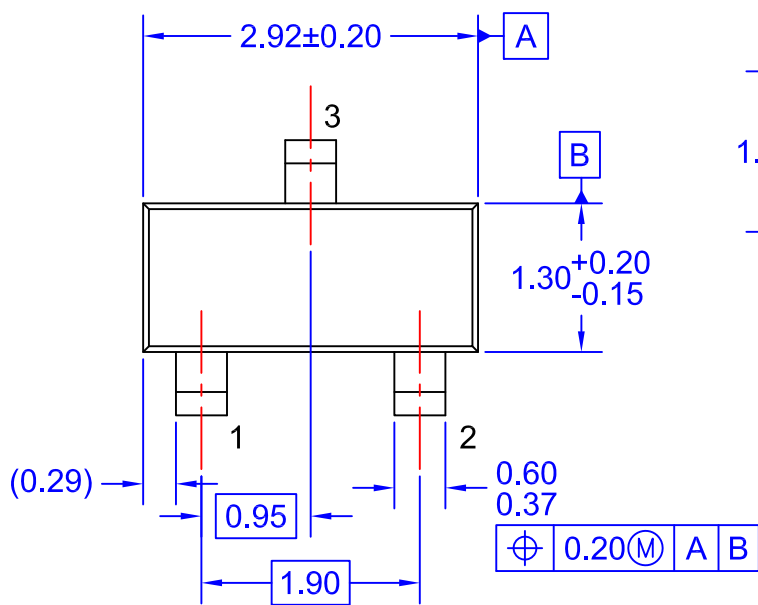
**Figure 2. Saturation Voltage**



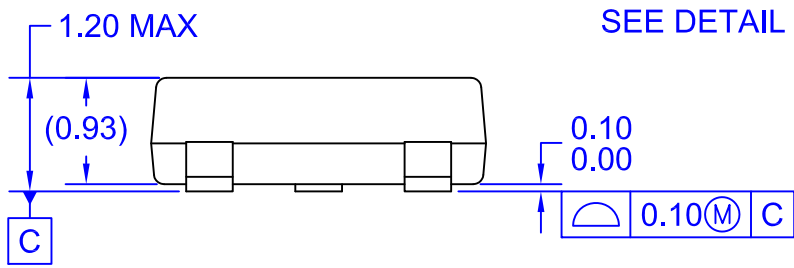
**Figure 3. Capacitance**



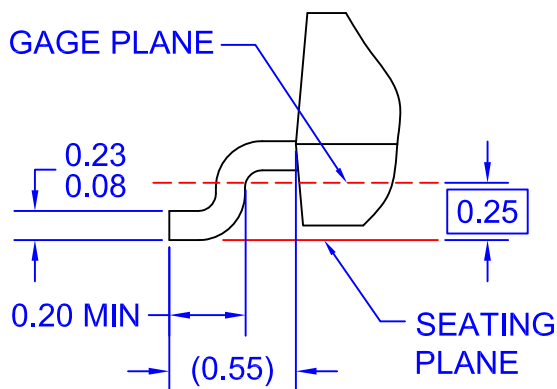
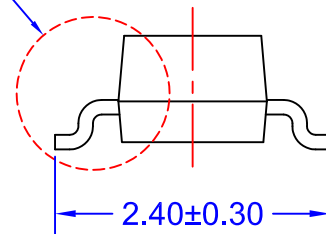
**Figure 4. Current Gain Bandwidth Product**



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