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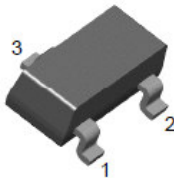
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FJV92MTF

PNP Epitaxial Silicon Transistor

Features

- High Voltage Transistor



SOT-23
1.Base 2.Emitter 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	$^\circ\text{C/W}$

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	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -5\text{V}, I_C = 0$		-0.1	μA
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

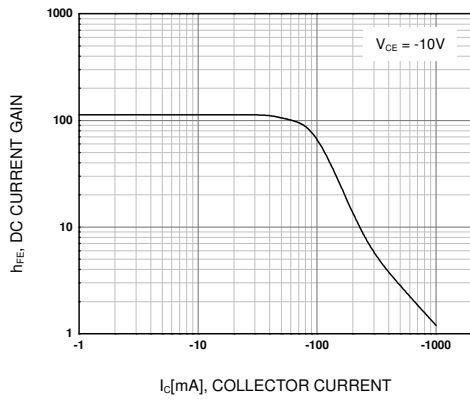


Figure 1. DC current Gain

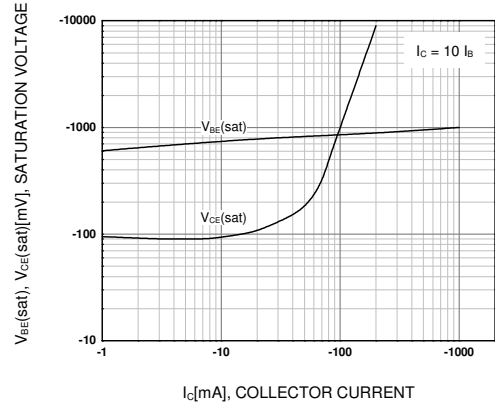


Figure 2. Saturation Voltage

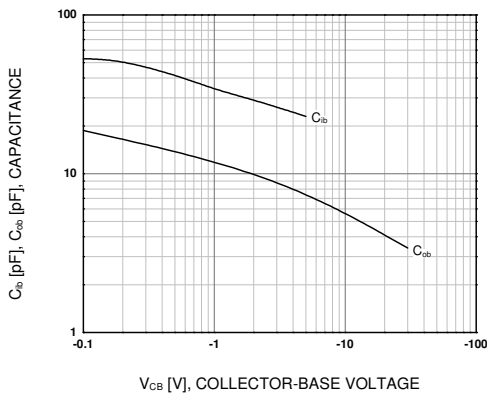


Figure 3. Capacitance

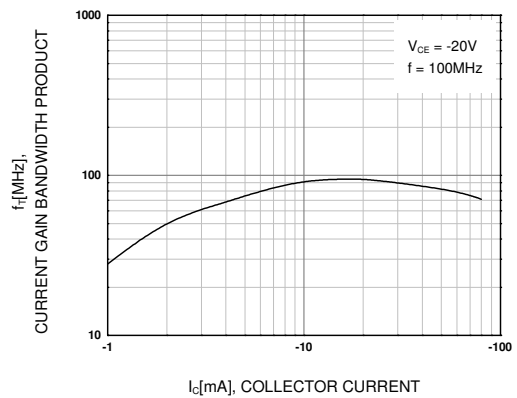
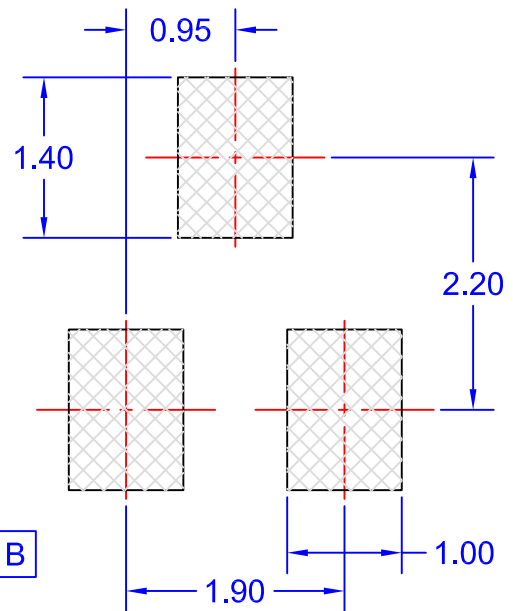
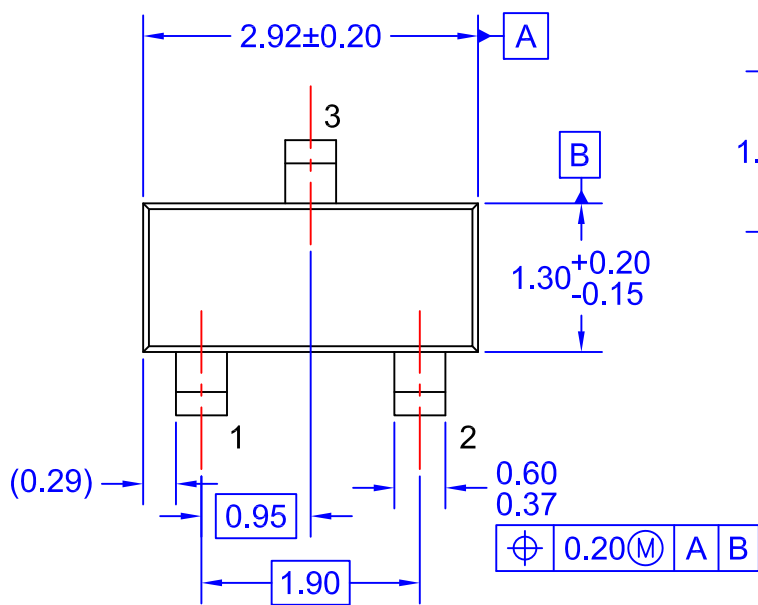
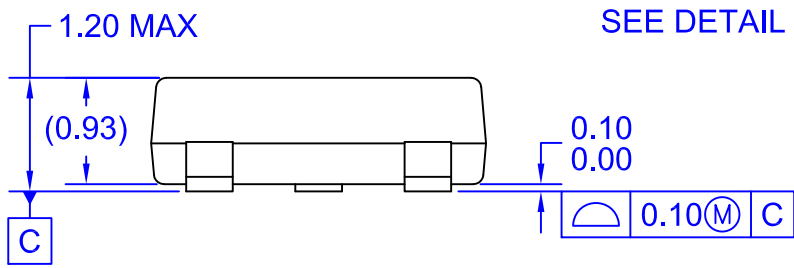


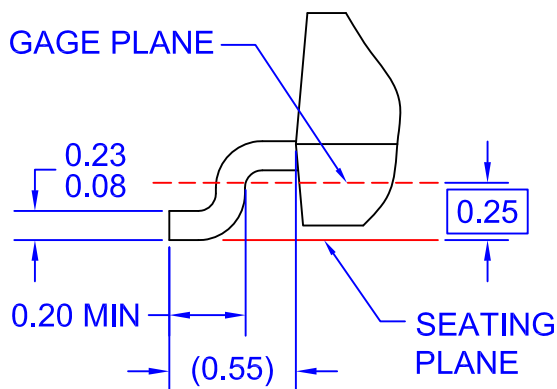
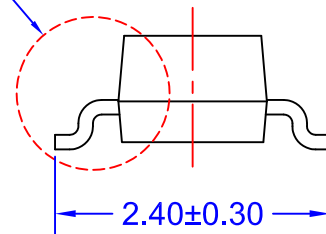
Figure 4. Current Gain Bandwidth Product



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RECOMMENDATION



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DETAIL A
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