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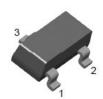


June 2009

# FJV92MTF PNP Epitaxial Silicon Transistor

### **Features**

• High Voltage Transistor



SOT-23
1.Base 2.Emitter 3.Collector

### **Absolute Maximum Ratings** T<sub>A</sub> = 25 ℃ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-350	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-350	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current	-500	mA
P <sub>C</sub>	Collector Power Dissipation	350	mW
T <sub>STG</sub>	Storage Temperature	150	∞
R <sub>TH</sub> (j-a)	Thermal Resistance junction to Ambient	357	°C/W

# **Electrical Characteritics** $T_A = 25$ °C unless otherwise noted

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

<sup>\*</sup> Pulse Test: PW≤300µs, Duty Cycle≤2%

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## **Typical Characteristics**

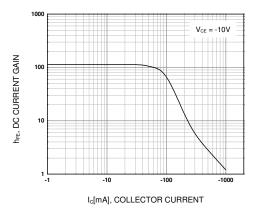


Figure 1. DC current Gain

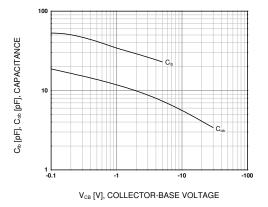


Figure 3. Capacitance

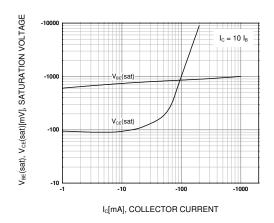


Figure 2. Saturation Voltage

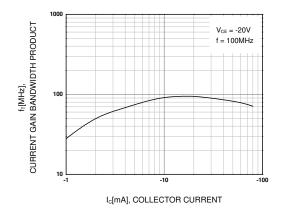
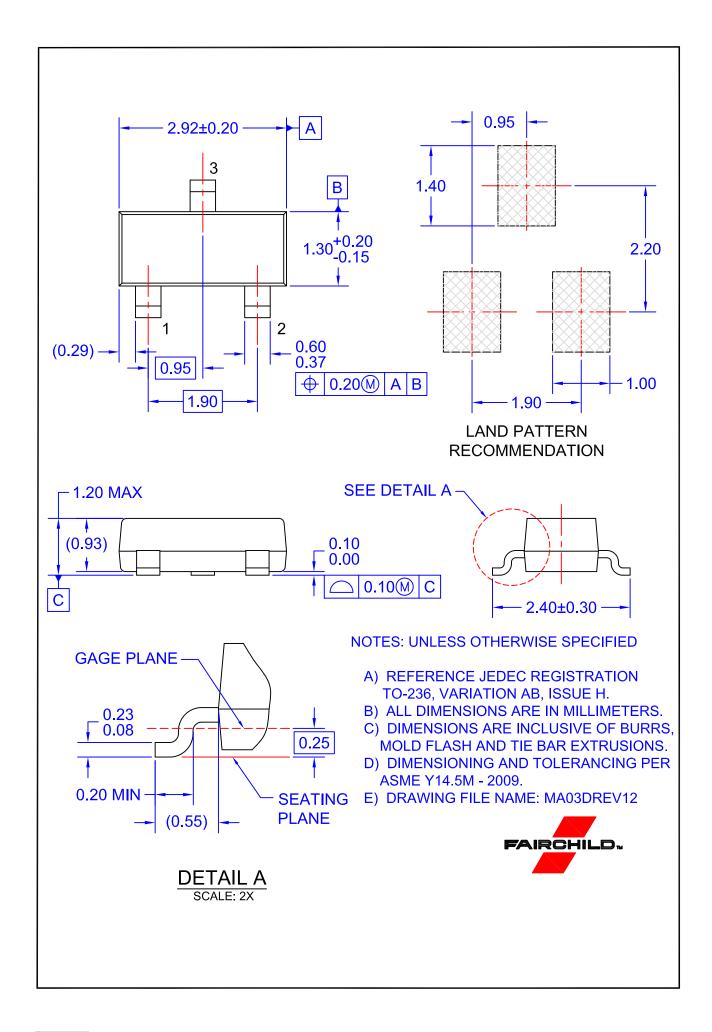


Figure 4. Current Gain Bandwidth Product



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