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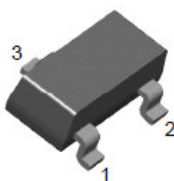
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FJV92MTF

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

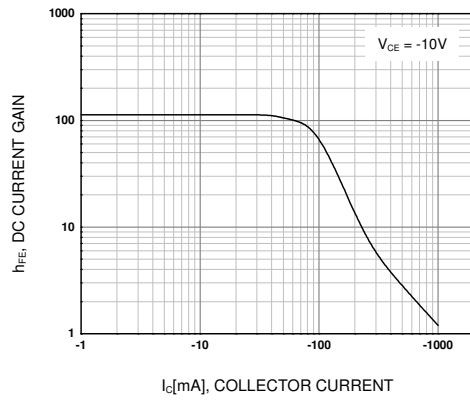


Figure 1. DC current Gain

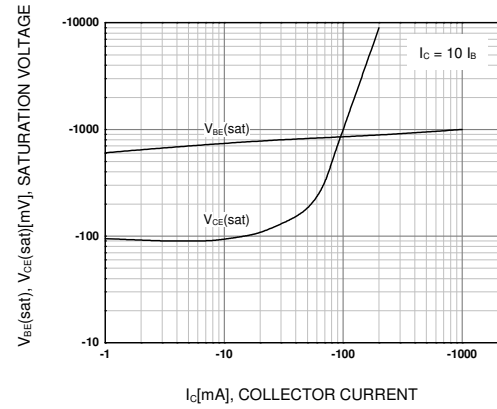


Figure 2. Saturation Voltage

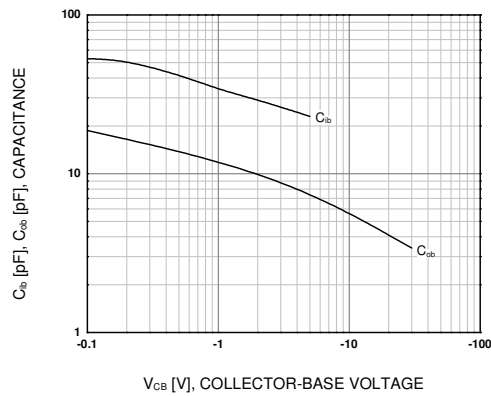


Figure 3. Capacitance

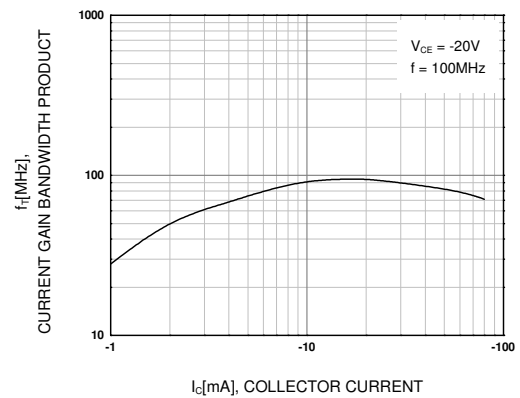


Figure 4. Current Gain Bandwidth Product

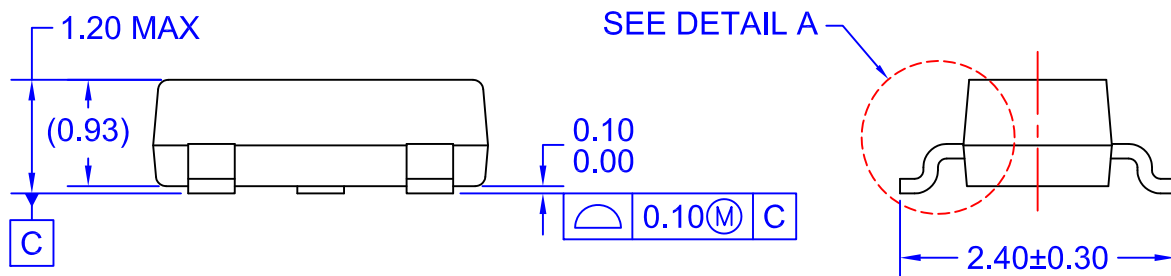


Figure 10.10 illustrates the dimensioning of a part with a hole. The diagram shows a cross-section of a mechanical part. Key dimensions and features include:

- Hole Diameter:** 0.23 with a tolerance of 0.08.
- Distance from Left Face to Start of Hole:** 0.20 MIN.
- Distance from Left Face to Center of Hole:** (0.55).
- Distance from Center of Hole to Right Face:** 0.25.
- GAGE PLANE:** Indicated by a dashed line across the part.
- SEATING PLANE:** Indicated by a solid line across the part.

- A) REFERENCE JEDEC REGISTRATION TO-236, VARIATION AB, ISSUE H.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.
- C) DIMENSIONS ARE INCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR EXTRUSIONS.
- D) DIMENSIONING AND TOLERANCING PER ASME Y14.5M - 2009.
- E) DRAWING FILE NAME: MA03DREV12



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