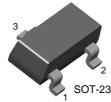


FMMT549 PNP Low Saturation Transistor

Features

- · This device is designed with high current gain and low saturation voltage with collector currents up to 2A continous.
- · Sourced from process PB.



1. Base 2. Emitter 3. Collector

Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V _{CEO}	Collector-Emitter Voltage	-30	V
V _{CBO}	Collector-Base Voltage	-35	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current - Continuous - Peak Pulse Current	-1 -2	A A
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature Range	- 55 ~ 150	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

These ratings are based on a maximum junction temperature of 150 degrees C.
These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations

Thermal Characteristics *

Symbol	Parameter	Value	Unit	
P _D	Total Device Dissipation, by R _{θJA} Derate above 25°C	500 4	m₩ m₩/°C	
R_{\thetaJA}	Thermal Resistance, Junction to Ambient	250	250 °C/W	

* Device mounted on FR-4 PCB 4.5" X 5", mounting pad 0.02 in² of 2 oz copper.

August 2006

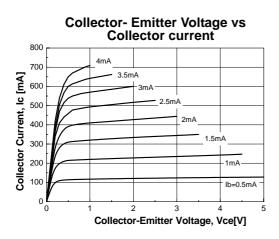
Symbol	Parameter	Conditions	Min.	Max.	Units
Off Characte	ristics				
BV _{CEO}	Collector-Emitter Breakdown Voltage *	I _C = -10mA, I _B = 0 -30			V
BV _{CBO}	Collector-Base Breakdown Voltage	$I_{\rm C} = -100 \mu A, I_{\rm E} = 0$	-35		V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_{\rm E} = -100 \mu A, I_{\rm C} = 0$	-5.0		V
I _{CBO}	Collector Cutoff Current	$V_{CB} = -30V, I_E = 0$ $V_{CB} = -30V, I_E = 0, T_a = 100^{\circ}C$		-100 -10	nA μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4.0V, I _C =0		-100	nA
On Characte	ristics *	· · · ·			
h _{FE}	DC Current Gain	$V_{CE} = -2.0V, I_{C} = -50mA$ $V_{CE} = -2.0V, I_{C} = -500mA$ $V_{CE} = -2.0V, I_{C} = -1A$ $V_{CE} = -2.0V, I_{C} = -2A$	70 100 80 40	300	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	$I_{C} = -1A, I_{B} = -100mA$ $I_{C} = -2A, I_{B} = -200mA$		-500 -750	mV mV
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = -1A, I _B = -100mA		-1.25	V
V _{BE} (on)	Base-Emitter On Voltage	I _C = -1A, V _{CE} = -2.0V		-1.0	V
Small Signal	Characterics	· · · ·		•	
f _T	Current Gain Bandwidth Product	I _C = -100mA, V _{CE} = -5V, 100 f = 100MHz			MHz
C _{ob}	Output Capacitance	V _{CB} = -10V, I _E = 0, f = 1MHz		25	pF

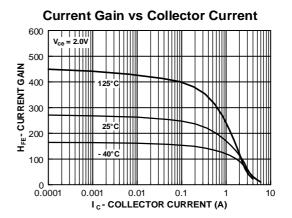
Electrical Characteristics* T_C = 25°C unless otherwise noted

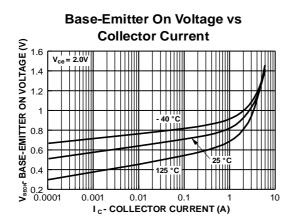
* DC Item are tested by Pulse Test: Pulse Width≤300us, Duty Cycle≤2%

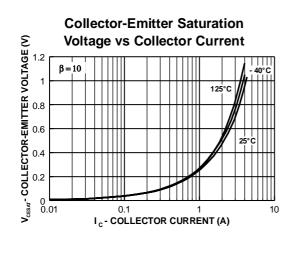
FMMT549 PNP Low Saturation Transistor

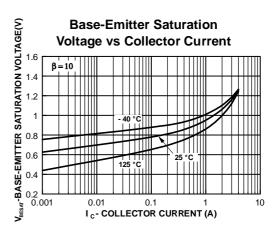
Typical Characteristics

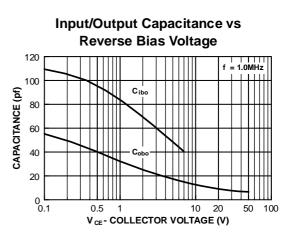


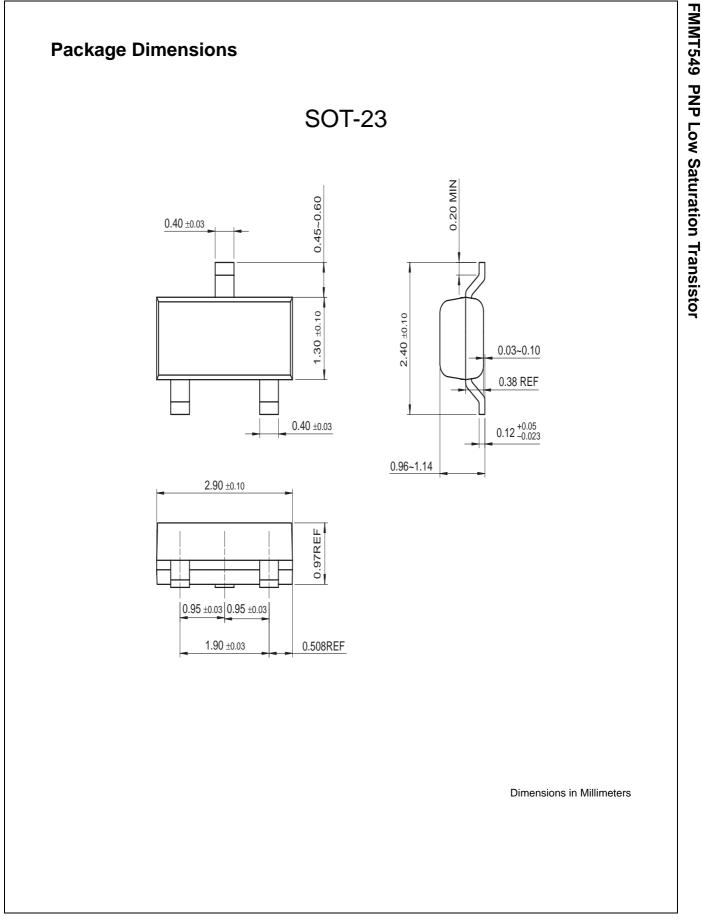












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