

General Purpose Transistors



SMD Diodes Specialist

MMBT2369-G (NPN)

RoHS Device

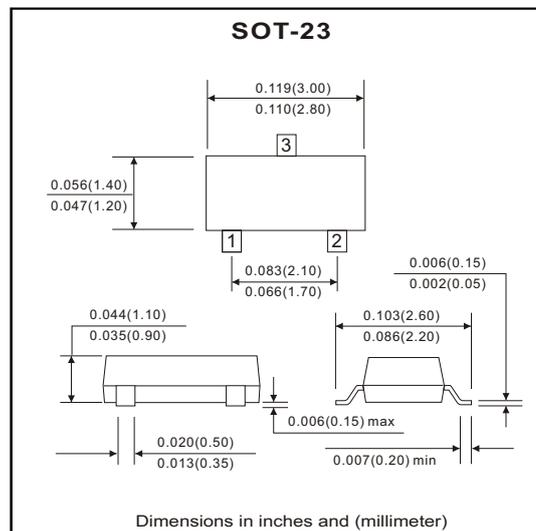
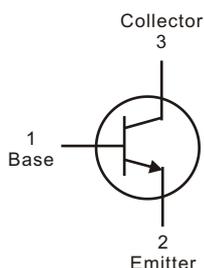


Features

-Power dissipation

$$P_C=0.3W$$

Marking: M1J



Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base voltage	V_{CBO}	40	V
Collector-Emitter voltage	V_{CEO}	15	V
Emitter-Base voltage	V_{EBO}	4.5	V
Collector current-continuous	I_C	0.2	A
Power dissipation	P_C	300	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	417	°C/W
Junction and storage temperature range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Collector-Base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	40			V
Collector-Emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	15			V
Emitter-Base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	4.5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.4	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=10mA$	40		120	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=100mA$	20			
Collector-Emitter saturation voltage	$V_{CE(SAT)}$	$I_C=10mA, I_B=1mA$			0.25	V
Collector output capacitance	C_{ob}	$V_{CB}=5V, I_E=0, f=1MHz$			4	pF
Turn on time	t_{ON}	$V_{CC}=3V, I_C=10mA, I_B=3mA$			12	nS
Storage time	t_s	$V_{CC}=3V, I_C=10mA, I_{B1}=3mA, I_{B2}=1.5mA$			13	nS
Turn off time	t_{OFF}				18	nS

REV:A

RATING AND CHARACTERISTIC CURVES (MMBT2369-G)

Fig.1 Minimum Current Gain Characteristics

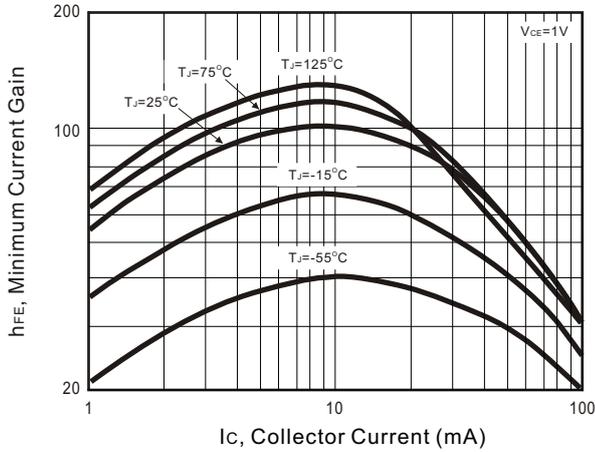


Fig.2 Saturation Voltage Limits

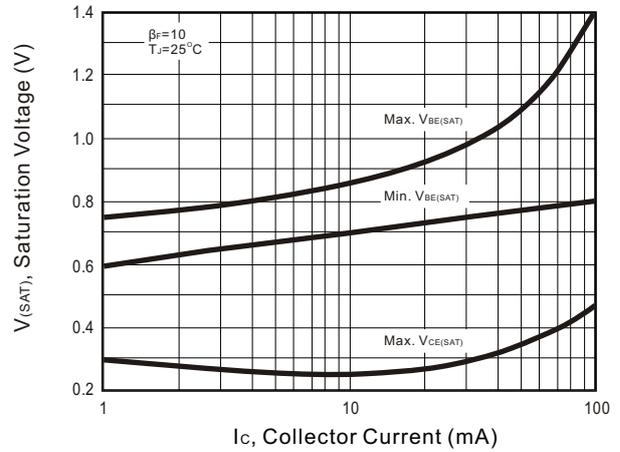


Fig.3 Typical Temperature Coefficient

