

FEATURES

Epitaxial planar die construction.

Ultra-small surface mount package.

Marking:MIJ

MMBT2369 (NPN)

MAXIMUM RATINGS (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	200	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=10\mu A, I_E=0$	40		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=10mA, I_B=0$	15		V
Emitter-base breakdown voltage	V_{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}	$V_{CE}=1.0V, I_C=10mA$	40	120	
		$V_{CE}=2.0V, I_C=100mA$	20		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1.0mA$		0.25	V
Output capacitance	C_{obo}	$V_{CE}=5.0V, I_E=0, f=1.0MH$		4.0	pF
Small signal current gain	h_{fe}	$I_C=10mA, V_{CE}=1$	5.0		
Storage Time	t_s	$I_{B1}=I_{B2}=I_C=10mA$		13	ns
Turn-on time	t_{on}	$V_{CC}=3V, I_C=10mA,$		12	ns
Turn-off time	t_{off}	$V_{CC}=3V, I_C=10mA,$		18	ns