



MMBT9015B

Preliminary

PNP SILICON TRANSISTOR

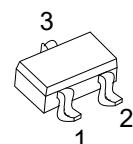
PRE-AMPLIFIER, LOW LEVEL
& LOW NOISE

■ FEATURES

*High total power dissipation. (450mW)

*Excellent h_{FE} linearity.

*Complementary to UTC MMBT9014

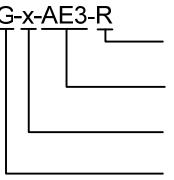


SOT-23
(JEDEC TO-236)

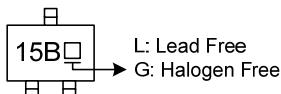
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MMBT9015BL-x-AE3-R	MMBT9015BG-x-AE3-R	SOT-23	B	E	C	Tape Reel

Note: Pin Assignment: B: Base E: Emitter C: Collector

MMBT9015BG-x-AE3-R		<p>(1)R: Tape Reel (2)AE3: SOT-23 (3)x: refer to Classification of h_{FE1} (4)G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING



L: Lead Free
G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Emitter Voltage	V _{CEO}	-45	V
Collector-Base Voltage	V _{CBO}	-50	V
Emitter Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-100	mA
Collector dissipation	P _C	225	mW
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Voltage	V _{CEO}	I _C =-100μA, I _E =0	-45			V
Collector-Base Voltage	V _{CBO}	I _C =-1mA, I _B =0	-50			V
Emitter Base Voltage	V _{EBO}	I _E =-100μA, I _C =0	-5			V
Collector cutoff current	I _{CBO}	V _{CB} =-50V, I _E =0			-50	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC Current Gain	h _{FE}	V _{CE} =-5V, I _C =-1mA	60	200	600	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =-100mA, I _B =-5mA		-0.2	-0.7	V
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =-100mA, I _B =-5mA		-0.82	-1.0	V
Base-emitter on voltage	V _{BE(ON)}	V _{CE} =-5V, I _C =-2mA	-0.6	-0.65	-0.75	V
Current-Gain-Bandwidth Product	f _T	V _{CE} =-5V, I _C =-10mA	100	190		MHz

■ CLASSIFICATION OF h_{FE}

RANK	A	B	C
RANGE	60-150	100-300	200-600

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