

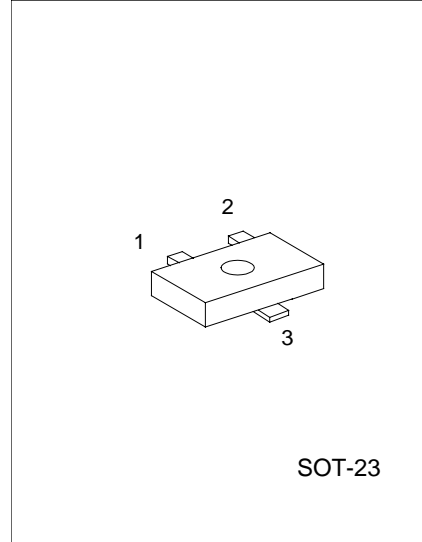
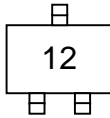
# UTC MMBT9012     PNP EPITAXIAL SILICON TRANSISTOR

1W OUTPUT AMPLIFIER OF  
PORTABLE RADIOS IN CLASS B  
PUSH-PULL OPERATION

## FEATURES

- \*High total power dissipation. (625mW)
- \*High collector current. (-500mA)
- \*Excellent hFE linearity
- \*Complementary to UTC MMBT9013

## MARKING



1: EMITTER   2: BASE   3: COLLECTOR

## ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified )

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	VCBO	-40	V
Collector-emitter voltage	VCEO	-20	V
Emitter-base voltage	VEBO	-5	V
Collector current	Ic	-500	mA
Collector dissipation	Pc	225	mW
Junction Temperature	Tj	150	°C
Storage Temperature	TSTG	-55 ~ +150	°C

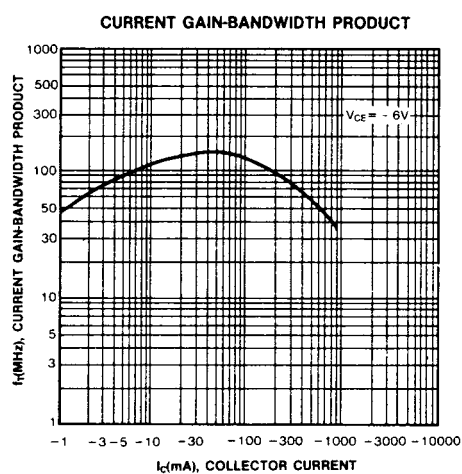
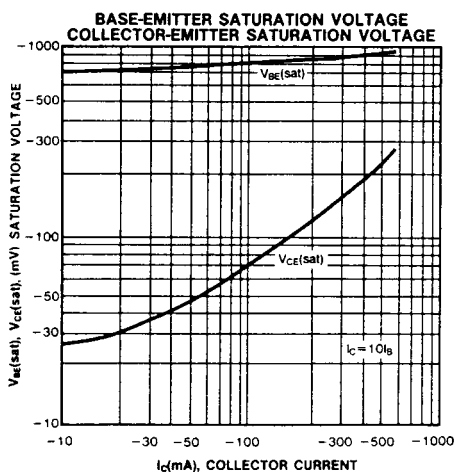
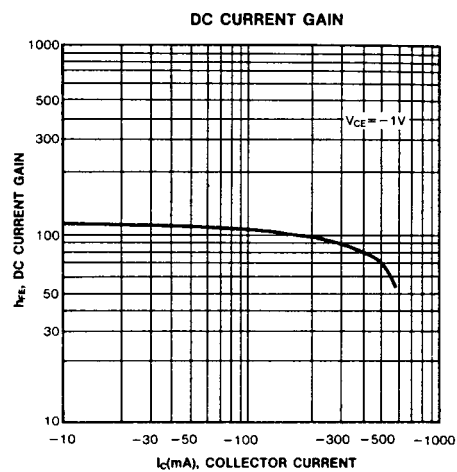
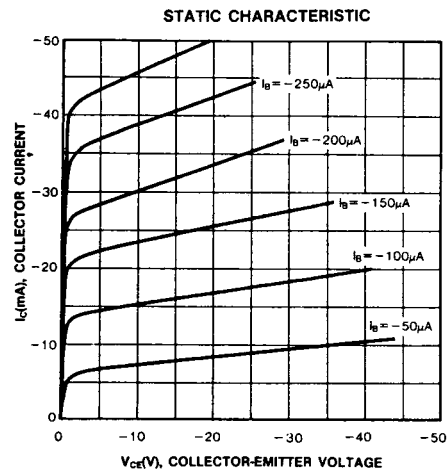
## ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BVCBO	Ic=-100μA, IE=0	-40			V
Collector-emitter breakdown voltage	BVCEO	Ic=-1mA, IB=0	-20			V
Emitter-base breakdown voltage	BVEBO	IE=-100μA, Ic=0	-5			V
Collector cutoff current	ICBO	VCE=-25V, IE=0			-100	nA
Emitter cutoff current	IEBO	VEB=-3V, Ic=0			-100	nA
DC current gain	hFE1	VCE=-1V, Ic=-50mA	64	120	300	
	hFE2	VCE=-1V, Ic=-500mA	40	90		
Collector-emitter saturation voltage	VCE(sat)	Ic=-500mA, IB=-50mA		-0.18	-0.6	V
Base-emitter saturation voltage	VBE(sat)	Ic=-500mA, IB=-50mA		-0.95	-1.2	V
Base-emitter on voltage	VBE(on)	VCE=-1V, Ic=-10mA	-0.6	-0.67	-0.7	V

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CLASSIFICATION OF hFE1

RANK	D	E	F	G	H	I
RANGE	64-91	78-112	96-135	112-166	144-202	190-300



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