## UTC MMBT9012 PNP EPITAXIAL SILICON TRANSISTOR

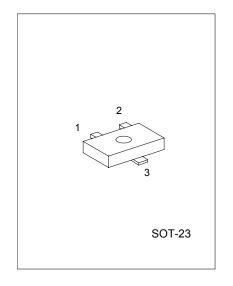
# 1W OUTPUT AMPLIFIER OF POTABLE RADIOS IN CLASS B **PUSH-PULL OPERATION**

#### **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	Vсво	-40	V
Collector-emitter voltage	VCEO	-20	V
Emitter-base voltage	VEBO	-5	V
Collector current	lc	-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 T		TYP	MAX	UNIT		
Collector-base breakdown voltage	ВУсво	Ic=-100μA,IE=0	-40			V		
Collector-emitter breakdown voltage	BVCEO	Ic=-1mA,IB=0 -2				V		
Emitter-base breakdown voltage	BVEBO	IE=-100μA, Ic=0	-5			V		
Collector cutoff current	Ісво	Vcb=-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,lc=-10mA	-0.6	-0.67	-0.7	V		

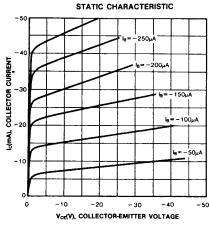
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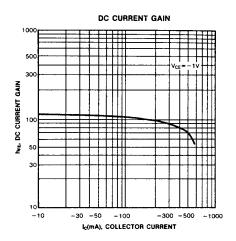
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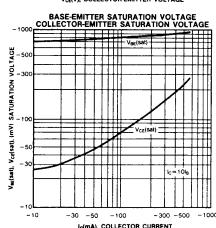
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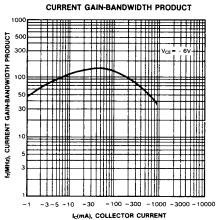
#### **CLASSIFICATION OF hFE1**

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









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### UTC MMBT9012 PNP EPITAXIAL SILICON TRANSISTOR

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