

UTC2SA1020

PNP EPITAXIAL SILICON TRANSISTOR

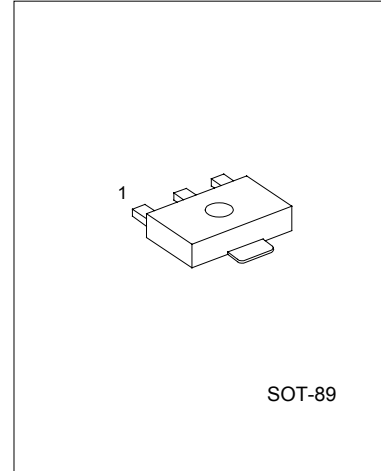
SILICON PNP EPITAXIAL TRANSISTOR

DESCRIPTION

The UTC 2SA1020 is designed for power amplifier and power switching applications.

FEATURES

- *Low collector saturation voltage:
VCE(sat)=-0.5V(max.) (IC=-1A)
- *High speed switching time: tstg=1.0μs(Typ.)
- *Complement to UTC 2SC2655



SOT-89

1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	VCBO	-50	V
Collector-Emitter Voltage	VCEO	-50	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	IC	-2	A
Collector Power Dissipation	PC	0.5	W
Collector Power Dissipation	PC*	1	W
Junction Temperature	Tj	150	°C
Storage Temperature	TSTG	-55 ~ +150	°C

* : Mounted on cermic substrate(250mm² × 0.8t)

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector cut-off current	ICBO	VCB=-50V, IE=0			-1.0	μA
Emitter cut-off current	IEBO	VEB=-5V, IC=0			-1.0	μA
Collector to emitter breakdown voltage	V(BR)CEO	IC=-10mA, IB=0	-50			V
DC Current Gain	hFE1 hFE2	VCE=-2V, IC=-0.5A VCE=-2V, IC=-1.5A	70 40		240	
Collector to emitter saturation voltage	VCE(sat)	IC=-1A, IB=-0.05A			-0.5	V
Base to emitter saturation voltage	VBE(sat)	IC=-1A, IB=-0.05A			-1.2	V
Transition frequency	fT	VCE=-2V, IC=-0.5A		100		MHz
Collector output capacitance	Cob	VCB=-10V, IE=0, f=1MHz		40		pF
Switching time	Turn-on time			0.1		μs
	Storage time			1.0		μs
	Fall time			0.1		μs

UTC

UNISONIC TECHNOLOGIES CO. LTD

1

QW-R208-021,A

UTC2SA1020 PNP EPITAXIAL SILICON TRANSISTOR

CLASSIFICATION OF h_{FE1}

RANK	O	Y
RANGE	70 - 140	120 - 240

TYPICAL PERFORMANCE CHARACTERISTICS

