

UTC2SA1020

PNP EPITAXIAL SILICON TRANSISTOR

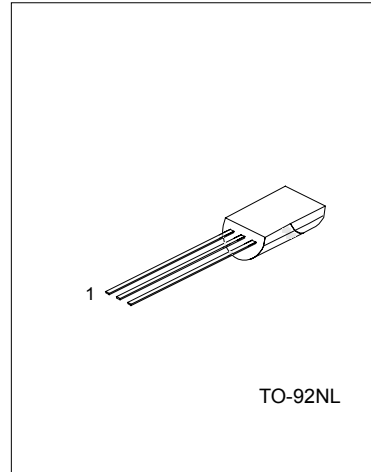
SILICON PNP EPITAXIAL TRANSISTOR

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



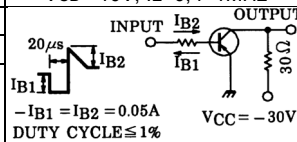
1:EMITTER 2:COLLECTOR 3:BASE

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

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	0.9	W
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 cut-off current	ICBO	V _{CB} =-50V, I _E =0			-1.0	μA
Emitter cut-off current	IEBO	V _{EB} =-5V, I _C =0			-1.0	μA
Collector to emitter breakdown voltage	V(BR)CEO	I _C =-10mA, I _B =0	-50			V
DC Current Gain	h _{FE1} h _{FE2}	V _{CE} =-2V, I _C =-0.5A V _{CE} =-2V, I _C =-1.5A	70 40		240	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C =-1A, I _B =-0.05A			-0.5	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C =-1A, I _B =-0.05A			-1.2	V
Transition frequency	f _T	V _{CE} =-2V, I _C =-0.5A		100		MHz
Collector output capacitance	Cob	V _{CB} =-10V, I _E =0, f=1MHz		40		pF
Switching time	Turn-on time	ton		0.1		μs
	Storage time	tstg		1.0		μs
	Fall time	tf		0.1		μs



UTC2SA1020 PNP EPITAXIAL SILICON TRANSISTOR

CLASSIFICATION OF h_{FE1}

RANK	O	Y
RANGE	70 - 140	120 - 240

TYPICAL PERFORMANCE CHARACTERISTICS

