



2SB1017

Preliminary

PNP EPITAXIAL SILICON TRANSISTOR

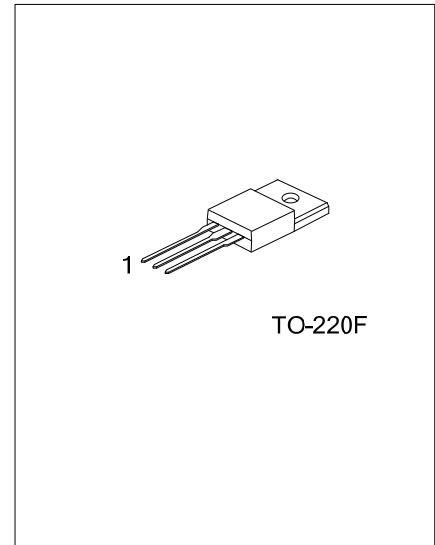
PNP SILICON EPITAXIAL TRANSISTOR

■ DESCRIPTION

The UTC **2SB1017** is a PNP silicon epitaxial transistor suited to be used in power amplifier applications.

■ FEATURES

* Low base drive



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SB1017L-x-TF3-T	2SB1017G-x-TF3-T	TO-220F	B	C	E	Tube

2SB1017L-x-TF3-T (1) Packing Type (2) Package Type (3) Rank (4) Lead Free	(1) T: Tube (2) TF3: TO-220F (3) x: refer to Classification of h_{FE} (4) Halogen Free, L: Lead Free
--	---

■ ABSOLUTE MAXIMUM RATINGS ($T_c=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-4	A
Base Current	I_B	-0.4	A
Collector Dissipation ($T_c=25^\circ\text{C}$)	P_C	25	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{ST}	-55 ~ 150	$^\circ\text{C}$

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 ($T_c=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=-50\text{mA}$, $I_B=0$	-80			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=-80\text{V}$, $I_E=0$			-30	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-100	μA
DC Current Gain	h_{FE1}	$V_{CE}=-5\text{V}$, $I_C=-0.5\text{A}$	40		240	
	h_{FE2}	$V_{CE}=-5\text{V}$, $I_C=-3\text{A}$	15			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-3\text{A}$, $I_B=-0.3\text{A}$		-1	-1.7	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE}=-5\text{V}$, $I_C=-3\text{A}$		-1	-1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE}=-5\text{V}$, $I_C=-0.5\text{A}$		9		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $f=1\text{MHz}$		130		pF

■ h_{FE} CLASSIFICATION

Classification	R	O	Y
h_{FE1}	40 ~ 80	70 ~ 140	120 ~ 240

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.