2SB1017

Preliminary **PNP EPITAXIAL SILICON TRANSISTOR**

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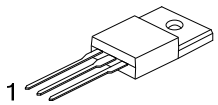

TO-220F

■ 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°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°C)	P_C	25	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{ST}	-55 ~ 150	°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°C, unless otherwise noted)

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

■ H_{FE} CLASSIFICATION

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