



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

KEC

**SEMICONDUCTOR
TECHNICAL DATA**

KTC9013S

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

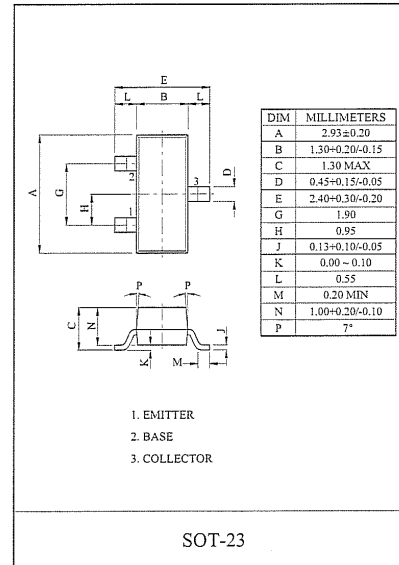
FEATURES

- Excellent h_{FE} Linearity.
- Complementary to KTC9012S.

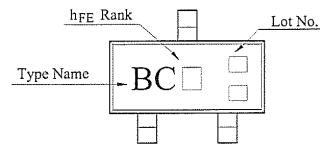
MAXIMUM RATING ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Emitter Current	I_E	-500	mA
Collector Power Dissipation	P_C^*	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

* P_C : Package Mounted On 99.5% Alumina ($10 \times 8 \times 0.6\text{mm}$)



Marking



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=35\text{V}, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=1\text{V}, I_C=50\text{mA}$	96	-	246	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$	-	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	$I_C=100\text{mA}, V_{CE}=1\text{V}$	-	0.8	1.0	V
Transition Frequency	f_T	$V_{CE}=6\text{V}, I_C=20\text{mA}, f=100\text{MHz}$	140	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$	-	7.0	-	pF

Note : h_{FE} Classification F:96 ~ 135, G:118 ~ 166, H:144 ~ 202, I:176 ~ 246



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KTC9013S

