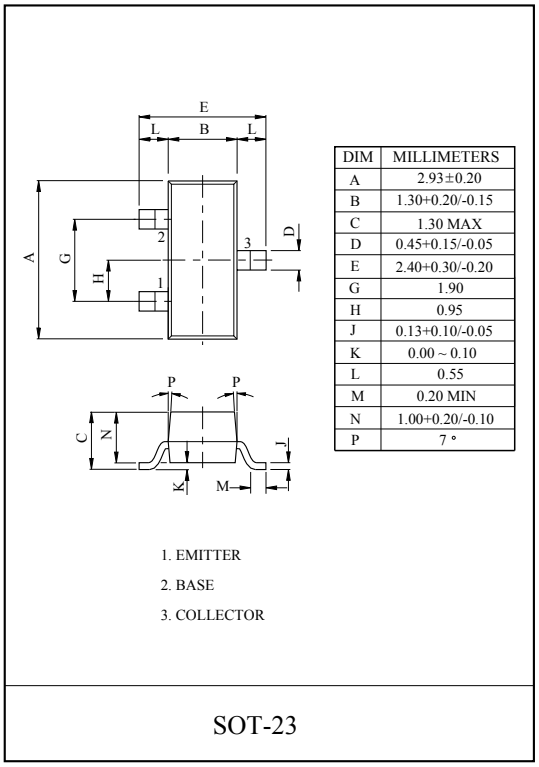
BCX19

EPITAXIAL PLANAR NPN TRANSISTOR

GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURE

· Super Mini Packaged Transistors for Hybrid Circuits.



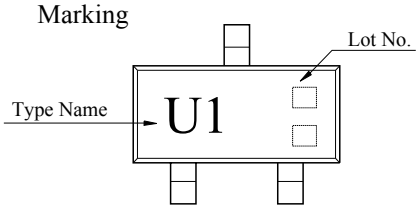
DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.45+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7 °

SOT-23

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CEO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	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	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-65 ~ 150	℃

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	45	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	I_C=10μA, V_{BE}=0	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	5.0	-	-	V
Collector Cut-off Current	I_{CBO}	V_{CB}=20V, I_E=0	-	-	100	nA
		Ta=150℃, V_{CB}=20V, I_E=0	-	-	5.0	μA
DC Current Gain	h_{FE}	V_{CE}=1V, I_C=100mA	100	-	600	
		V_{CE}=1V, I_C=300mA	70	-	-	
		V_{CE}=1V, I_C=500mA	40	-	-	
Base-Emitter Voltage	$V_{BE(ON)}$	V_{CE}=1V, I_C=500mA	-	-	1.2	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA	-	-	0.62	V
Transition Frequency	f_T	I_C=10mA, V_{CE}=5V, f=100MHz	-	200	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz	-	6.0	-	pF