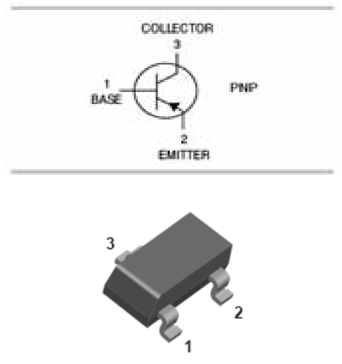
PNP General Purpose Transistor **BCX17/BCX18**

FEATURES

- High current (max.500mA).
- Low voltage(max.45V).

Lead-free



SOT-23

APPLICATIONS

- Saturated switching and driver applications e.g.for Industrial service.
- Thick and thin-film circuits

ORDERING INFORMATION

Type No.	Marking	Package Code
BCX17	T1	SOT-23
BCX18	T2	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

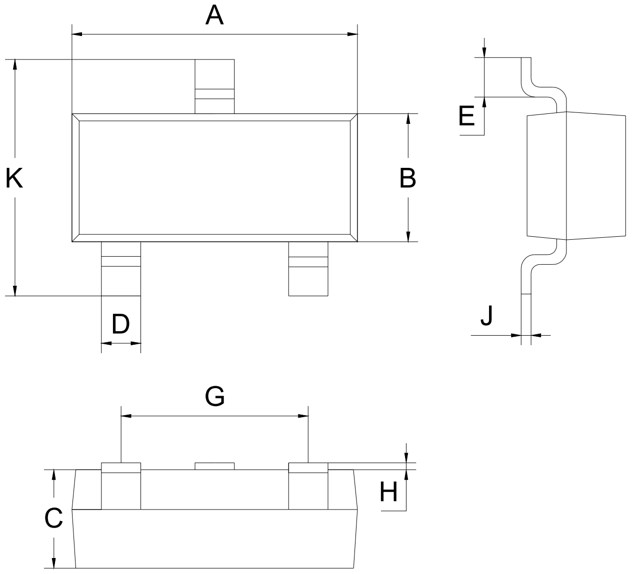
Symbol	Parameter		Value	Units
V_{CBO}	Collector-Base Voltage	BCX17 BCX18	-50 -30	V
V_{CEO}	Collector-Emitter Voltage	BCX17 BCX18	-45 -25	V
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector current(DC)		-500	mA
I_{CM}	Peak collector current		-1	A
I_{BM}	Peak base current		-200	mA
P_{tot}	Total power dissipation		250	mW
$R_{th\ j\text{-}a}$	Thermal resistance from junction to ambient		500	K/W
T_j, T_{stg}	Junction and Storage Temperature		-65 to +150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0 BCX17 BCX18	-50 -30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0 BCX17 BCX18	-45 -25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-1V,I_C=-100mA V_{CE}=-1V,I_C=-300mA V_{CE}=-1V,I_C=-500mA	100 70 40		600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA			-0.62	V
Base-emitter on voltage	$V_{BE(on)}$	I_C=-500mA, V_{CE}=-1V			-1.2	V
Collecter capacitance	C_C	I_E=I_e=0,V_{CB}=-10V, f=1MHz		9		pF
Transition frequency	f_T	V_{CE}=-5V, I_C= -10mA f=100MHz	80			MHz

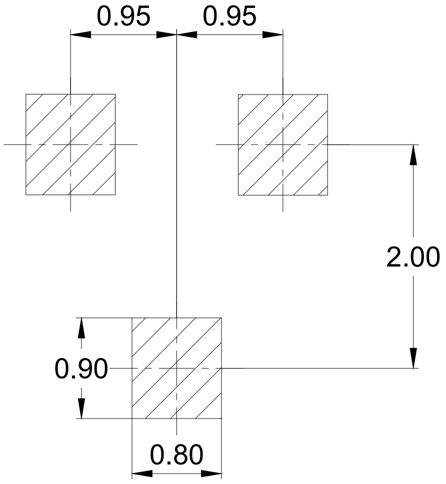
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BCX17/BCX18	SOT-23	3000/Tape&Reel