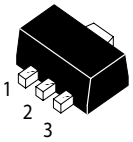
WEITRON

BCX56

NPN Plastic-Encapsulate Transistor

Lead(Pb)-Free



SOT-89

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current Continuous	I_C	1.0	A
Total Device Dissipation T_A=25°C	P_D	500	mW
Junction Temperature Range	T_J	+150	˚C
Storage Temperature Range	Tstg	-55 to +150	˚C

Device Marking

BCX56=BH , BCX56-10=BK , BCX56-16=BL

OFF CHARACTERISTICS

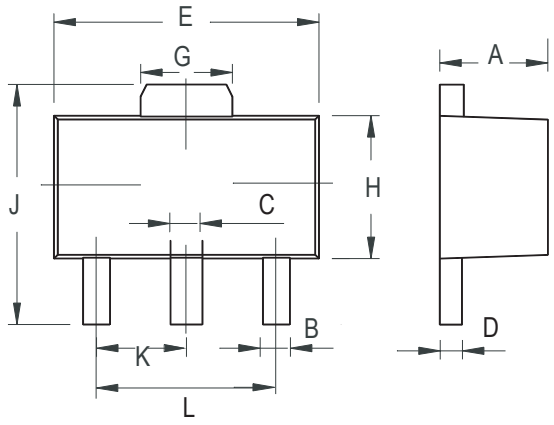
Characteristics	Symbol	Min	Max	Unit
Collector-Base Breakdown Voltage, I_C = 100μA, I_E = 0	$V(BR)_{CBO}$	-	100	V
Collector-Emitter Breakdown Voltage, I_C = 10mA, I_B = 0	$V(BR)_{CEO}$	-	80	V
Emitter-Base Breakdown Voltage, I_E = 10μA, I_C = 0	$V(BR)_{EBO}$	-	5.0	V
Collector Cut-off Current, V_{CB} = 30V, I_E = 0	I_{CBO}	-	0.1	μA
Emitter Cut-off Current, V_{EB} = 5.0V, I_C = 0	I_{EBO}	-	0.1	μA

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted) (Countinued)

Characteristics		Symbol	Min	Typ	Max	Unit
ON CHARACTERISTICS						
DC Current Gain V_{CE} = 2.0V, I_C = 150mA	BCX56 BCX56-10 BCX56-16	h_{FE1}	63 63 100	- - -	250 160 250	-
V_{CE} = 2.0V, I_C = 5.0mA		h_{FE2}	40	-	-	
V_{CE} = 2.0V, I_C = 500mA		h_{FE3}	25	-	-	
Collector-Emitter Saturation Voltage I_C = 500mA, I_B = 50mA		$V_{CE(sat)}$	-	-	0.5	V
Base-Emitter Voltage V_{CE} = 2.0V, I_C = 500mA		$V_{BE(ON)}$	-	-	1.0	V
TransitionFrequence V_{CE} = 5V, I_C = 1mA, f = 100MHz		f_T	130	-	-	MHz

SOT-89 Outline Dimensions

unit:mm



SOT-89		
Dim	**Min**	**Max**
A	1.400	1.600
B	0.320	0.520
C	0.360	0.560
D	0.350	0.440
E	4.400	4.600
G	1.400	1.800
H	2.300	2.600
J	3.940	4.250
K	1.500TYP	
L	2.900	3.100