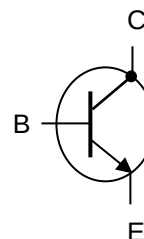


NPN BSX62-BSX63

SWITCHING TRANSISTORS

The BSX62 and BSX63 are NPN switching transistors mounted in TO-39 metal package. They are intended for use in medium power switching. High current and low voltage. Compliance to RoHS.



ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value		Unit
			BSX62	BSX63	
V _{CEO}	Collector-Emitter Voltage	I _B =0	40	60	V
V _{CBO}	Collector-Base Voltage	I _E =0	60	80	V
V _{EBO}	Emitter-Base Voltage	I _C =0	5		V
I _C	Collector Current		3		A
I _{CM}	Collector Peak Current		3		A
I _{BM}	Base Peak Current		500		mA
P _D	Total Power Dissipation	T _{amb} = 25°	5		W
T _J	Junction Temperature		200		°C
T _{amb}	Operating ambient temperature		-65 to +150		
T _{Stg}	Storage Temperature range		-65 to +150		

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-a}	Thermal Resistance, Junction to ambient	200	°C/W
R_{thJ-c}	Thermal Resistance, Junction to case	28	°C/W

SWITCHING TIMES

Symbol	Ratings		Value	Unit
t_{on}	Turn-on time	$I_{Con} = 1\text{ A}; I_{Bon} = 50\text{ mA}$ $I_{Boff} = -50\text{ mA}$	300	ns
t_{off}	Turn-off time		1.5	µs

NPN BSX62-BSX63

ELECTRICAL CHARACTERISTICS

T_j=25°C unless otherwise specified

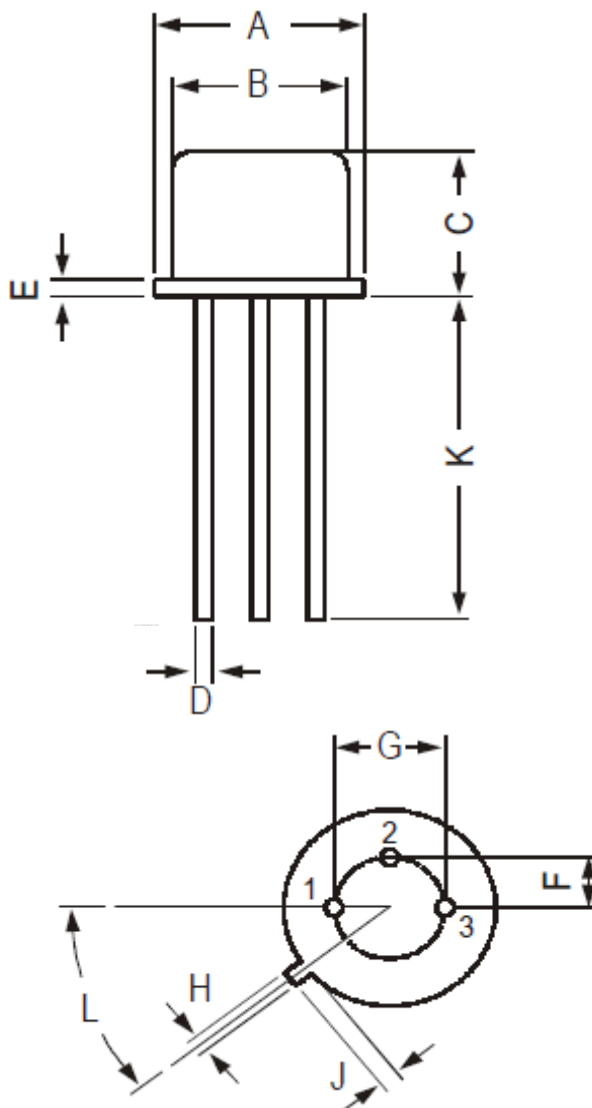
Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
I _{CBO}	Collector Cutoff Current	V _{CB} = 40 V, I _E = 0	BSX62	-	-	100	nA
		V _{CB} = 60 V, I _E = 0	BSX63				
		V _{CB} = 40 V, I _E = 0 T _j = 150°C	BSX62	-	-	100	μA
		V _{CB} = 60 V, I _E = 0 T _j = 150°C	BSX63				
I _{EBO}	Emitter Cutoff Current	V _{BE} = 5.0 V, I _C = 0		-	-	100	nA
V _{CE(SAT)}	Collector-Emitter saturation Voltage	I _C = 1 A, I _B = 100 mA		-	-	0.7	V
		I _C = 2 A, I _B = 200 mA		-	-	0.8	
V _{BE(SAT)}	Base-Emitter saturation Voltage	I _C = 1 A, I _B = 100 mA		-	-	1.2	V
		I _C = 2 A, I _B = 200 mA		-	-	1.3	
V _{BE}	Base-Emitter Voltage	I _C = 100 mA, V _{CE} = 1 V		-	-	1	V
		I _C = 1 A, V _{CE} = 1 V		1	-	1.2	
		I _C = 2 A, V _{CE} = 5 V		-	-	1.3	
h _{FE}	DC Current Gain	I _C = 100 m V _{CE} = 1 V	BSX62/10	-	110	-	-
			BSX63/10				
			BSX62/16	-	180	-	
			BSX63/16				
		I _C = 1 A V _{CE} = 1 V	BSX62/10	63	100	160	
			BSX63/10				
			BSX62/16	100	160	250	
			BSX63/16				
		I _C = 2 A V _{CE} = 1 V	BSX62/10	-	70	-	
			BSX63/10				
			BSX62/16	-	120	-	
			BSX63/16				
f _T	Transition frequency	I _C = 200 mA, V _{CE} = 10 V f = 100MHz		30	70	-	MHz
C _C	Collector capacitance	I _E = i _e = 0, V _{CB} = 10 V f = 1MHz		-	-	70	pF

NPN BSX62-BSX63

MECHANICAL DATA CASE TO-39

DIMENSIONS (mm)		
	min	max
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	-	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	-
L	42°	48°

Pin 1 :	Emitter
Pin 2 :	Base
Pin 3 :	Collector
Case :	Collector



Revised August 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may results from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.