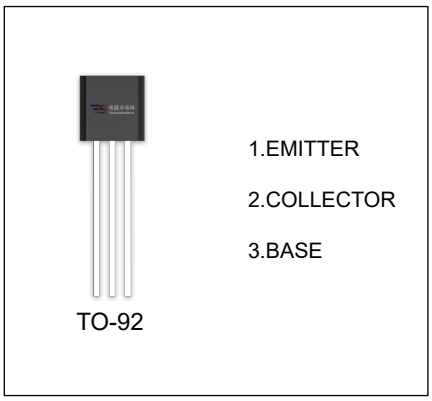
BC636 / BC638 / BC640 TRANSISTOR (PNP)



FEATURES

High current transistors

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BC636	TO-92	Bulk	1000pcs/Bag
BC636-TA	TO-92	Tape	2000pcs/Box
BC638	TO-92	Bulk	1000pcs/Bag
BC638-TA	TO-92	Tape	2000pcs/Box
BC640	TO-92	Bulk	1000pcs/Bag
BC640-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter		Value	Unit
V_{CBO}	Collector-Base Voltage	BC636	-45	V
		BC638	-60	
		BC640	-100	
V_{CEO}	Collector-Emitter Voltage	BC636	-45	V
		BC638	-60	
		BC640	-80	
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current -Continuous		-1	A
P_C	Collector Power Dissipation		0.83	W
$R_{\theta JA}$	Thermal Resista nce, junction to Ambient		150	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range		-55~+150	℃

T_a=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	BC636	-45			V
			BC638	-60			
			BC640	-100			
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C =-1mA,I_B=0	BC636	-45			V
			BC638	-60			
			BC640	-80			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0		-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V,I_E=0				-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V,I_C=0				- 0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}= -2V,I_C=- 5mA		40			
	$h_{FE(2)}$	V_{CE}= -2V,I_C=- 150mA		63		250	
	$h_{FE(3)}$	V_{CE}= -2V,I_C=- 500mA		25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=- 500mA,I_B= -50mA				-0.5	V
Base-emitter voltage	V_{BE}	V_{CE}= -2V,I_C= -500mA				- 1	V
Transition frequency	f_T	V_{CE}= -5V,I_C=- 50mA,f=100MHz		100			MHz

CLASSIFICATION OF $h_{FE(2)}$

Rank	BC636-10	BC636-16, BC638-16, BC640-16
Range	63-160	100-250