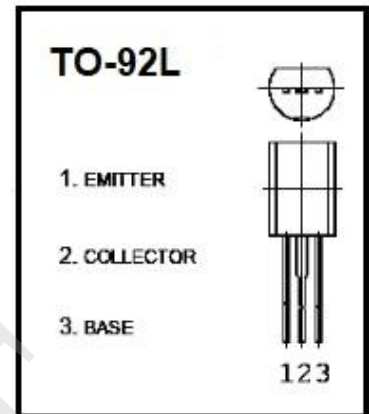


2SB647

- **Complementary to:** 2SD667A
- **Package:** TO-92L

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-base voltage	BV_{CBO}	-120	V
Collector-emitter voltage	BV_{CEO}	-80	V
Emitter-base voltage	BV_{EBO}	-5	V
Collector current	I_{CM}	-1	A
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=-10\mu A, I_E=0$	-120			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=-1mA, I_B=0$	-80			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=-10\mu A, I_C=0$	-5			V
collector-base cut-off current	I_{CBO}	$V_{CB}=-100V, I_E=0$			-10	μA
collector-emitter cut-off current	I_{CEO}	$V_{CE}=-80V, I_B=0$			-10	μA
emitter-base cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-10	μA
DC current gain	H_{FE}	$V_{CE}=-5V, I_C=-0.15A$	60		200	
	H_{FE1}	$V_{CE}=-5V, I_C=-0.5A$	30			
collector-emitter saturation voltage	V_{CESAT}	$I_C=-0.5A, I_B=-50mA$			-1	V
Base-Emitter Saturation Voltage	V_{BESAT}	$I_C=-0.5A, I_B=-50mA$			-1.2	V
Transition frequency	f_T	$V_{CE}=-5V, I_C=-150mA$		140		MHz

Classification of H_{FE}

Rank	B	C
Range	60-120	100-200