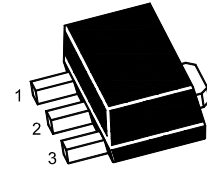


BCP56U

NPN Silicon Epitaxial Planar Transistor

Medium Power Transistor



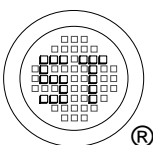
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	80	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Peak Collector Current	I_{CM}	1.5	A
Total Power Dissipation	P_{tot}	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 2\text{ V}$, $I_C = 5\text{ mA}$ at $V_{CE} = 2\text{ V}$, $I_C = 150\text{ mA}$ at $V_{CE} = 2\text{ V}$, $I_C = 500\text{ mA}$	BCP56-10U h_{FE}	25	-	-	-
	h_{FE}	63	-	160	-
	BCP56-16U h_{FE}	100	-	250	-
	h_{FE}	25	-	-	-
Collector Base Cutoff Current at $V_{CB} = 30\text{ V}$	I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	100	-	-	V
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	80	-	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Voltage at $V_{CE} = 2\text{ V}$, $I_C = 500\text{ mA}$	V_{BE}	-	-	1	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$, $f = 100\text{ MHz}$	f_T	-	130	-	MHz

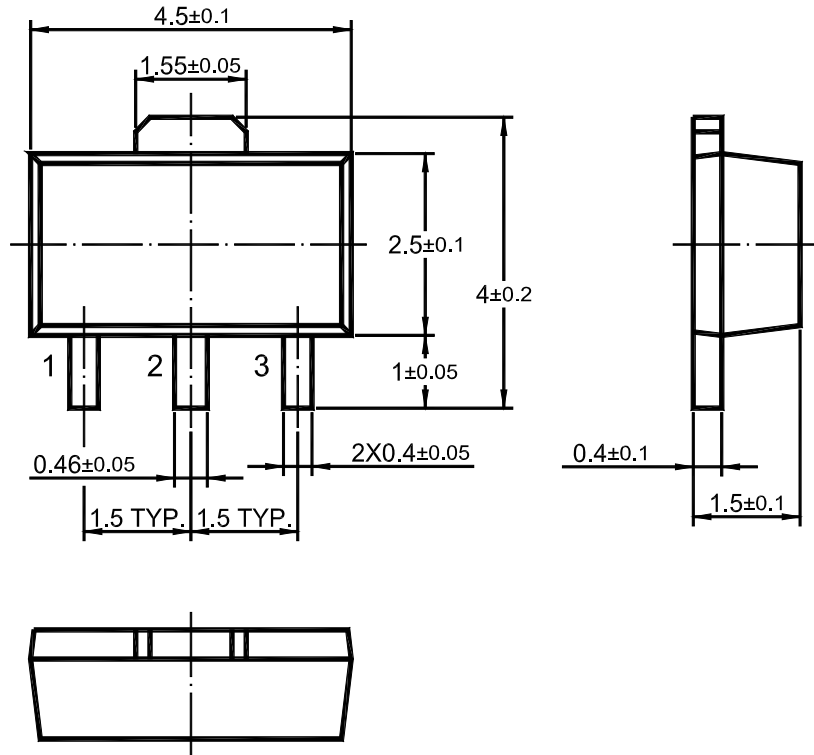


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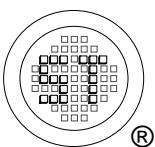


BCP56U

SOT-89 PACKAGE OUTLINE



Dimensions in mm



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Dated: 18/09/2012 Rev: 01