

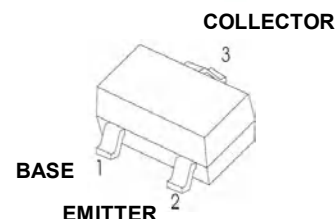
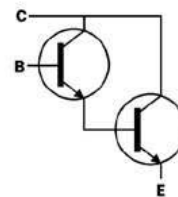


BCV47 TRANSISTOR (NPN)

FEATURES

- High Collector Current
- High Current Gain

MARKING:FG



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MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	10	V
I_{C}	Collector Current	500	mA
P_{C}	Collector Power Dissipation	300	mW
$R_{\theta\text{JA}}$	Thermal Resistance From Junction To Ambient	416	$^{\circ}\text{C/W}$
$T_{\text{J}}, T_{\text{stg}}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

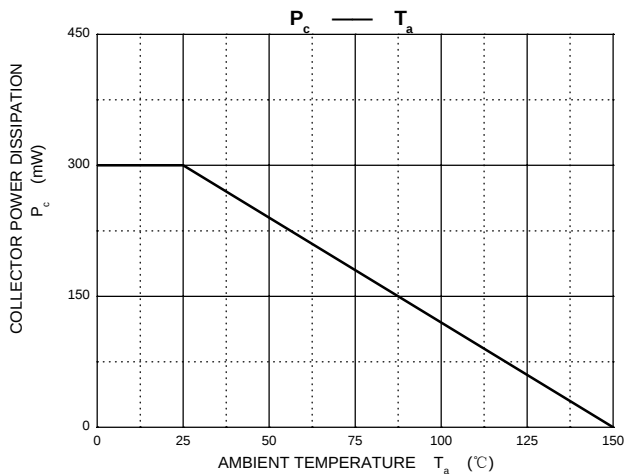
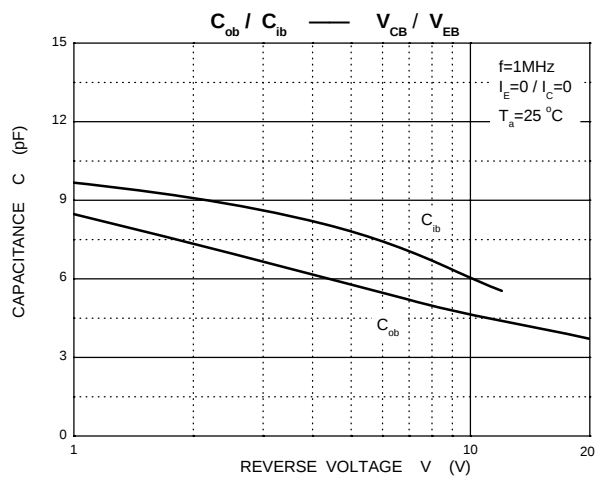
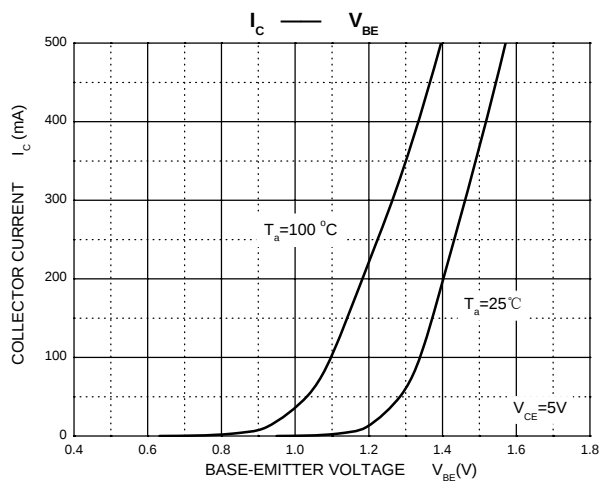
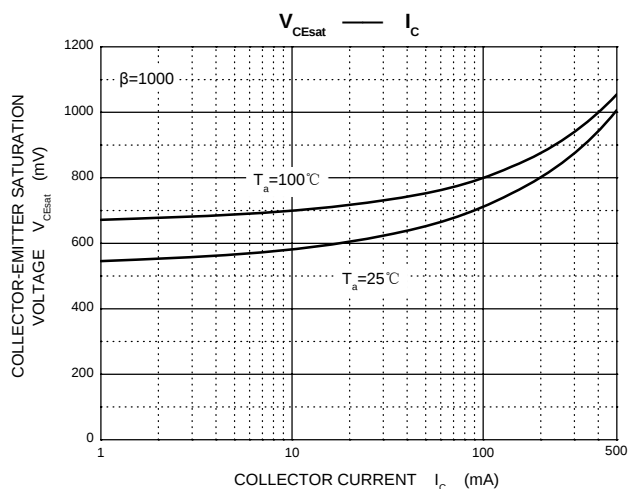
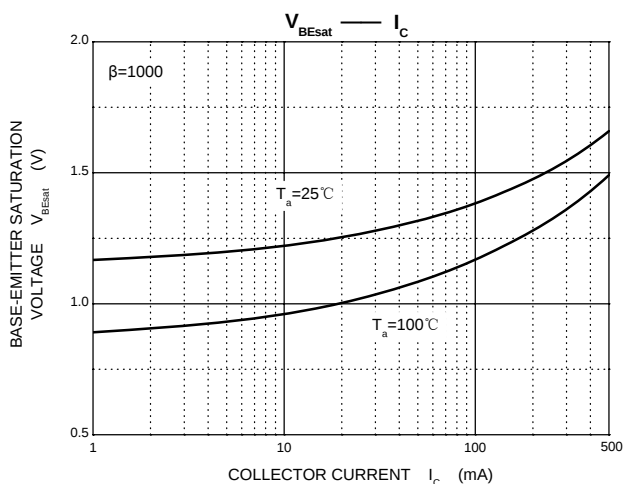
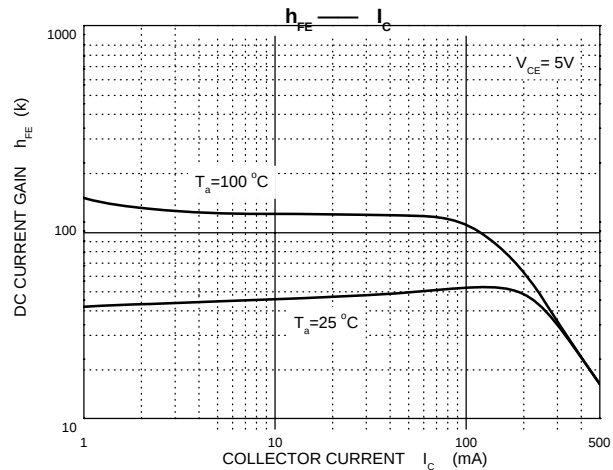
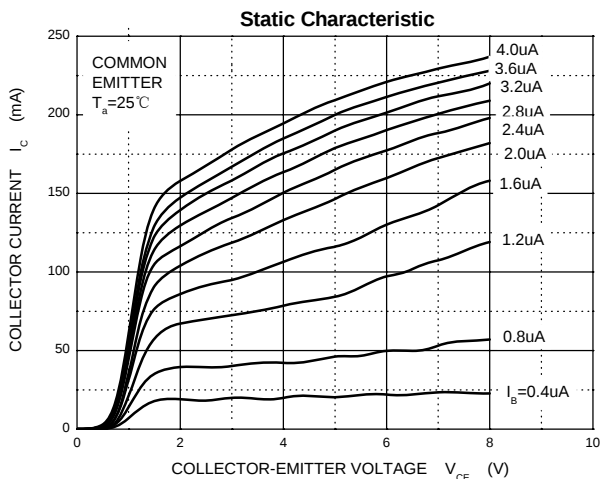
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=100\mu\text{A}, I_{\text{E}}=0$	80			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=10\text{mA}, I_{\text{B}}=0$	60			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=10\mu\text{A}, I_{\text{C}}=0$	10			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=60\text{V}, I_{\text{E}}=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=4\text{V}, I_{\text{C}}=0$			0.1	μA
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=100\mu\text{A}$	2000			
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=10\text{mA}$	4000			
	$h_{\text{FE}(3)}$	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=100\text{mA}$	10000			
	$h_{\text{FE}(4)}$	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=0.5\text{A}$	2000			
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	$I_{\text{C}}=100\text{mA}, I_{\text{B}}=0.1\text{mA}$			1	V
Base-emitter saturation voltage	$V_{\text{BE}(\text{sat})}$	$I_{\text{C}}=100\text{mA}, I_{\text{B}}=0.1\text{mA}$			1.5	V
Transition frequency	f_{T}	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=50\text{mA}, f=100\text{MHz}$		170		MHz
Collector output capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}, I_{\text{E}}=0, f=1\text{MHz}$		3.5		pF



迈拓电子

MAITUO ELECTRONIC

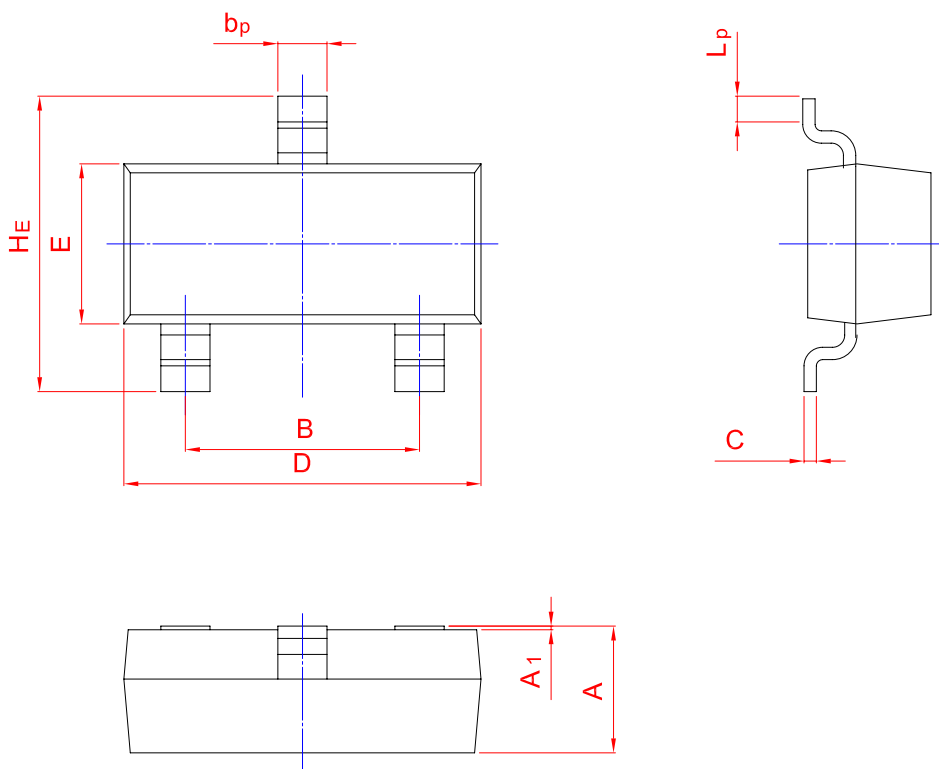
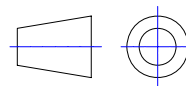




PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

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UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20