

**BC807-16/25/40 / BC817-16/25/40 Series --  
comparison report**

Prepared by HankHsiao  
Approved by HankHsiao  
Issue date at 2016.5.11  
Reversion for A

Comparison report

Electrical Characteristics format compared:

	Before	After	Result																																																																																																																																																																										
Electrical Characteristics Format	<p>BC807-16/25/40 : 0.3 Watts, PNP Plastic-Encapsulate Transistor</p> <table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SYMBOL</th> <th>VALUE</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Collector-Base Breakdown <math>I_C = -10 \mu A</math> <math>I_E = 0</math></td> <td><math>V_{CB0}</math></td> <td>-50</td> <td>V</td> </tr> <tr> <td>Collector-Emitter Breakdown <math>I_C = -10 mA</math> <math>I_E = 0</math></td> <td><math>V_{CE0}</math></td> <td>-45</td> <td>V</td> </tr> <tr> <td>Emitter-Base Breakdown <math>I_E = -1 \mu A</math> <math>I_C = 0</math></td> <td><math>V_{EB0}</math></td> <td>-5</td> <td>V</td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = -45 V</math> <math>I_E = 0</math></td> <td><math>I_{CBO}</math></td> <td>-0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = -40 V</math> <math>I_E = 0</math></td> <td></td> <td>-0.2</td> <td><math>\mu A</math></td> </tr> <tr> <td>Emitter Cut-off Current <math>V_{EB} = -4 V</math> <math>I_C = 0</math></td> <td><math>I_{EBO}</math></td> <td>-0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector-Emitter Saturation at <math>I_C = -500mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{CE(sat)}</math></td> <td>-0.7</td> <td>V</td> </tr> <tr> <td>Base-Emitter Saturation at <math>I_C = -500 mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{BE(sat)}</math></td> <td>-1.2</td> <td>V</td> </tr> <tr> <td>Transition Frequency <math>V_{CE} = -5 V</math> <math>I_C = -10 mA</math> <math>f = 50MHz</math></td> <td><math>f_T</math></td> <td>80</td> <td>MHz</td> </tr> <tr> <td>DC Current</td> <td></td> <td></td> <td></td> </tr> <tr> <td>807-16</td> <td></td> <td>100</td> <td>250</td> </tr> <tr> <td>807-25</td> <td><math>V_{CE} = -1 V</math> <math>I_C = -100 mA</math></td> <td>160</td> <td>400</td> </tr> <tr> <td>807-40</td> <td></td> <td>250</td> <td>600</td> </tr> </tbody> </table>	PARAMETER	SYMBOL	VALUE	UNIT	Collector-Base Breakdown $I_C = -10 \mu A$ $I_E = 0$	$V_{CB0}$	-50	V	Collector-Emitter Breakdown $I_C = -10 mA$ $I_E = 0$	$V_{CE0}$	-45	V	Emitter-Base Breakdown $I_E = -1 \mu A$ $I_C = 0$	$V_{EB0}$	-5	V	Collector Cut-off Current $V_{CB} = -45 V$ $I_E = 0$	$I_{CBO}$	-0.1	$\mu A$	Collector Cut-off Current $V_{CB} = -40 V$ $I_E = 0$		-0.2	$\mu A$	Emitter Cut-off Current $V_{EB} = -4 V$ $I_C = 0$	$I_{EBO}$	-0.1	$\mu A$	Collector-Emitter Saturation at $I_C = -500mA$ $I_E = 50 mA$	$V_{CE(sat)}$	-0.7	V	Base-Emitter Saturation at $I_C = -500 mA$ $I_E = 50 mA$	$V_{BE(sat)}$	-1.2	V	Transition Frequency $V_{CE} = -5 V$ $I_C = -10 mA$ $f = 50MHz$	$f_T$	80	MHz	DC Current				807-16		100	250	807-25	$V_{CE} = -1 V$ $I_C = -100 mA$	160	400	807-40		250	600	<p>BC807-16/25/40 : 0.3 Watts, PNP Plastic-Encapsulate Transistor</p> <table border="1"> <thead> <tr> <th colspan="5">Electrical Characteristics (at <math>T_a = 25^\circ C</math> unless otherwise noted)</th> </tr> <tr> <th>PARAMETER</th> <th>SYMBOL</th> <th>Min</th> <th>Max</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Collector-Base Breakdown <math>I_C = -10 \mu A</math> <math>I_E = 0</math></td> <td><math>V_{CB0}</math></td> <td></td> <td>-50</td> <td>V</td> </tr> <tr> <td>Collector-Emitter Breakdown <math>I_C = -10 mA</math> <math>I_E = 0</math></td> <td><math>V_{CE0}</math></td> <td></td> <td>-45</td> <td>V</td> </tr> <tr> <td>Emitter-Base Breakdown <math>I_E = -1 \mu A</math> <math>I_C = 0</math></td> <td><math>V_{EB0}</math></td> <td></td> <td>-5</td> <td>V</td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = -45 V</math> <math>I_E = 0</math></td> <td><math>I_{CBO}</math></td> <td></td> <td>-0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = -40 V</math> <math>I_E = 0</math></td> <td></td> <td></td> <td>-0.2</td> <td><math>\mu A</math></td> </tr> <tr> <td>Emitter Cut-off Current <math>V_{EB} = -4 V</math> <math>I_C = 0</math></td> <td><math>I_{EBO}</math></td> <td></td> <td>-0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector-Emitter Saturation at <math>I_C = -500mA</math> <math>I_E = -50 mA</math></td> <td><math>V_{CE(sat)}</math></td> <td></td> <td>-0.7</td> <td>V</td> </tr> <tr> <td>Base-Emitter Saturation at <math>I_C = -500 mA</math> <math>I_E = -50 mA</math></td> <td><math>V_{BE(sat)}</math></td> <td></td> <td>-1.2</td> <td>V</td> </tr> <tr> <td>Transition Frequency <math>V_{CE} = -5 V</math> <math>I_C = -10 mA</math> <math>f = 50MHz</math></td> <td><math>f_T</math></td> <td></td> <td>80</td> <td>MHz</td> </tr> <tr> <td>DC Current</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>807-16</td> <td></td> <td>100</td> <td>250</td> <td></td> </tr> <tr> <td>807-25</td> <td><math>V_{CE} = -1 V</math> <math>I_C = -100 mA</math></td> <td>160</td> <td>400</td> <td></td> </tr> <tr> <td>807-40</td> <td></td> <td>250</td> <td>600</td> <td></td> </tr> </tbody> </table>	Electrical Characteristics (at $T_a = 25^\circ C$ unless otherwise noted)					PARAMETER	SYMBOL	Min	Max	UNIT	Collector-Base Breakdown $I_C = -10 \mu A$ $I_E = 0$	$V_{CB0}$		-50	V	Collector-Emitter Breakdown $I_C = -10 mA$ $I_E = 0$	$V_{CE0}$		-45	V	Emitter-Base Breakdown $I_E = -1 \mu A$ $I_C = 0$	$V_{EB0}$		-5	V	Collector Cut-off Current $V_{CB} = -45 V$ $I_E = 0$	$I_{CBO}$		-0.1	$\mu A$	Collector Cut-off Current $V_{CB} = -40 V$ $I_E = 0$			-0.2	$\mu A$	Emitter Cut-off Current $V_{EB} = -4 V$ $I_C = 0$	$I_{EBO}$		-0.1	$\mu A$	Collector-Emitter Saturation at $I_C = -500mA$ $I_E = -50 mA$	$V_{CE(sat)}$		-0.7	V	Base-Emitter Saturation at $I_C = -500 mA$ $I_E = -50 mA$	$V_{BE(sat)}$		-1.2	V	Transition Frequency $V_{CE} = -5 V$ $I_C = -10 mA$ $f = 50MHz$	$f_T$		80	MHz	DC Current					807-16		100	250		807-25	$V_{CE} = -1 V$ $I_C = -100 mA$	160	400		807-40		250	600																																									
	PARAMETER	SYMBOL	VALUE	UNIT																																																																																																																																																																									
	Collector-Base Breakdown $I_C = -10 \mu A$ $I_E = 0$	$V_{CB0}$	-50	V																																																																																																																																																																									
Collector-Emitter Breakdown $I_C = -10 mA$ $I_E = 0$	$V_{CE0}$	-45	V																																																																																																																																																																										
Emitter-Base Breakdown $I_E = -1 \mu A$ $I_C = 0$	$V_{EB0}$	-5	V																																																																																																																																																																										
Collector Cut-off Current $V_{CB} = -45 V$ $I_E = 0$	$I_{CBO}$	-0.1	$\mu A$																																																																																																																																																																										
Collector Cut-off Current $V_{CB} = -40 V$ $I_E = 0$		-0.2	$\mu A$																																																																																																																																																																										
Emitter Cut-off Current $V_{EB} = -4 V$ $I_C = 0$	$I_{EBO}$	-0.1	$\mu A$																																																																																																																																																																										
Collector-Emitter Saturation at $I_C = -500mA$ $I_E = 50 mA$	$V_{CE(sat)}$	-0.7	V																																																																																																																																																																										
Base-Emitter Saturation at $I_C = -500 mA$ $I_E = 50 mA$	$V_{BE(sat)}$	-1.2	V																																																																																																																																																																										
Transition Frequency $V_{CE} = -5 V$ $I_C = -10 mA$ $f = 50MHz$	$f_T$	80	MHz																																																																																																																																																																										
DC Current																																																																																																																																																																													
807-16		100	250																																																																																																																																																																										
807-25	$V_{CE} = -1 V$ $I_C = -100 mA$	160	400																																																																																																																																																																										
807-40		250	600																																																																																																																																																																										
Electrical Characteristics (at $T_a = 25^\circ C$ unless otherwise noted)																																																																																																																																																																													
PARAMETER	SYMBOL	Min	Max	UNIT																																																																																																																																																																									
Collector-Base Breakdown $I_C = -10 \mu A$ $I_E = 0$	$V_{CB0}$		-50	V																																																																																																																																																																									
Collector-Emitter Breakdown $I_C = -10 mA$ $I_E = 0$	$V_{CE0}$		-45	V																																																																																																																																																																									
Emitter-Base Breakdown $I_E = -1 \mu A$ $I_C = 0$	$V_{EB0}$		-5	V																																																																																																																																																																									
Collector Cut-off Current $V_{CB} = -45 V$ $I_E = 0$	$I_{CBO}$		-0.1	$\mu A$																																																																																																																																																																									
Collector Cut-off Current $V_{CB} = -40 V$ $I_E = 0$			-0.2	$\mu A$																																																																																																																																																																									
Emitter Cut-off Current $V_{EB} = -4 V$ $I_C = 0$	$I_{EBO}$		-0.1	$\mu A$																																																																																																																																																																									
Collector-Emitter Saturation at $I_C = -500mA$ $I_E = -50 mA$	$V_{CE(sat)}$		-0.7	V																																																																																																																																																																									
Base-Emitter Saturation at $I_C = -500 mA$ $I_E = -50 mA$	$V_{BE(sat)}$		-1.2	V																																																																																																																																																																									
Transition Frequency $V_{CE} = -5 V$ $I_C = -10 mA$ $f = 50MHz$	$f_T$		80	MHz																																																																																																																																																																									
DC Current																																																																																																																																																																													
807-16		100	250																																																																																																																																																																										
807-25	$V_{CE} = -1 V$ $I_C = -100 mA$	160	400																																																																																																																																																																										
807-40		250	600																																																																																																																																																																										
	<p>BC817-16/25/40 :</p> <table border="1"> <thead> <tr> <th>PARAMETER</th> <th>SYMBOL</th> <th>BC817-16</th> <th>BC817-25</th> <th>BC817-40</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Collector-Base Breakdown Voltage <math>I_C = 10\mu A</math> <math>I_E = 0</math></td> <td><math>V_{CB0}</math></td> <td>50</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td>Collector-Emitter Breakdown Voltage <math>I_C = 10mA</math> <math>I_E = 0</math></td> <td><math>V_{CE0}</math></td> <td>45</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td>Emitter-Base Breakdown Voltage <math>I_E = 1\mu A</math> <math>I_C = 0</math></td> <td><math>V_{EB0}</math></td> <td>5</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = 45V</math> <math>I_E = 0</math></td> <td><math>I_{CBO}</math></td> <td>0.1</td> <td></td> <td></td> <td><math>\mu A</math></td> </tr> <tr> <td>Emitter Cut-off Current <math>V_{EB} = 4V</math> <math>I_C = 0</math></td> <td><math>I_{EBO}</math></td> <td>0.1</td> <td></td> <td></td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector-Emitter Saturation Voltage <math>I_C = 500mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{CE(sat)}</math></td> <td>0.7</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td>Base-Emitter Saturation Voltage <math>I_C = 500mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{BE(sat)}</math></td> <td>1.2</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td>Transition Frequency <math>V_{CE} = 5V</math> <math>I_C = 10mA</math> <math>f = 100MHz</math></td> <td><math>f_T</math></td> <td>100</td> <td></td> <td></td> <td>MHz</td> </tr> <tr> <td>Junction Capacitance <math>V_{CB} = 10V</math> <math>f = 1.0MHz</math></td> <td><math>C_{CB0}</math></td> <td>10</td> <td></td> <td></td> <td>pF</td> </tr> <tr> <td>DC Current</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><math>V_{CE} = 1V</math> <math>I_C = 100mA</math></td> <td><math>h_{FE}</math></td> <td>100</td> <td>400</td> <td>600</td> <td></td> </tr> <tr> <td><math>V_{CE} = 1V</math> <math>I_C = 100mA</math></td> <td></td> <td>&gt;40</td> <td>160</td> <td>250</td> <td></td> </tr> <tr> <td>DC Current Gain</td> <td></td> <td>100-250</td> <td>160-400</td> <td>250-600</td> <td></td> </tr> <tr> <td>Min. DC Current Gain</td> <td><math>V_{CE} = 1V</math> <math>I_C = 500mA</math></td> <td><math>h_{FE}</math></td> <td>40</td> <td></td> <td></td> </tr> </tbody> </table>	PARAMETER	SYMBOL	BC817-16	BC817-25	BC817-40	UNIT	Collector-Base Breakdown Voltage $I_C = 10\mu A$ $I_E = 0$	$V_{CB0}$	50			V	Collector-Emitter Breakdown Voltage $I_C = 10mA$ $I_E = 0$	$V_{CE0}$	45			V	Emitter-Base Breakdown Voltage $I_E = 1\mu A$ $I_C = 0$	$V_{EB0}$	5			V	Collector Cut-off Current $V_{CB} = 45V$ $I_E = 0$	$I_{CBO}$	0.1			$\mu A$	Emitter Cut-off Current $V_{EB} = 4V$ $I_C = 0$	$I_{EBO}$	0.1			$\mu A$	Collector-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{CE(sat)}$	0.7			V	Base-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{BE(sat)}$	1.2			V	Transition Frequency $V_{CE} = 5V$ $I_C = 10mA$ $f = 100MHz$	$f_T$	100			MHz	Junction Capacitance $V_{CB} = 10V$ $f = 1.0MHz$	$C_{CB0}$	10			pF	DC Current						$V_{CE} = 1V$ $I_C = 100mA$	$h_{FE}$	100	400	600		$V_{CE} = 1V$ $I_C = 100mA$		>40	160	250		DC Current Gain		100-250	160-400	250-600		Min. DC Current Gain	$V_{CE} = 1V$ $I_C = 500mA$	$h_{FE}$	40			<p>BC817-16/25/40 :</p> <table border="1"> <thead> <tr> <th colspan="5">Electrical Characteristics (at <math>T_a = 25^\circ C</math> unless otherwise noted)</th> </tr> <tr> <th>PARAMETER</th> <th>SYMBOL</th> <th>Min</th> <th>Max</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Collector-Base Breakdown Voltage <math>I_C = 10\mu A</math> <math>I_E = 0</math></td> <td><math>V_{CB0}</math></td> <td></td> <td>50</td> <td>V</td> </tr> <tr> <td>Collector-Emitter Breakdown Voltage <math>I_C = 10mA</math> <math>I_E = 0</math></td> <td><math>V_{CE0}</math></td> <td></td> <td>45</td> <td>V</td> </tr> <tr> <td>Emitter-Base Breakdown Voltage <math>I_E = 1\mu A</math> <math>I_C = 0</math></td> <td><math>V_{EB0}</math></td> <td></td> <td>5</td> <td>V</td> </tr> <tr> <td>Collector Cut-off Current <math>V_{CB} = 45V</math> <math>I_E = 0</math></td> <td><math>I_{CBO}</math></td> <td></td> <td>0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Emitter Cut-off Current <math>V_{EB} = 4V</math> <math>I_C = 0</math></td> <td><math>I_{EBO}</math></td> <td></td> <td>0.1</td> <td><math>\mu A</math></td> </tr> <tr> <td>Collector-Emitter Saturation Voltage <math>I_C = 500mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{CE(sat)}</math></td> <td></td> <td>0.7</td> <td>V</td> </tr> <tr> <td>Base-Emitter Saturation Voltage <math>I_C = 500mA</math> <math>I_E = 50 mA</math></td> <td><math>V_{BE(sat)}</math></td> <td></td> <td>1.2</td> <td>V</td> </tr> <tr> <td>Transition Frequency <math>V_{CE} = 5V</math> <math>I_C = 10mA</math> <math>f = 100MHz</math></td> <td><math>f_T</math></td> <td></td> <td>100</td> <td>MHz</td> </tr> <tr> <td>Junction Capacitance <math>V_{CB} = 10V</math> <math>f = 1.0MHz</math></td> <td><math>C_{CB0}</math></td> <td></td> <td>10</td> <td>pF</td> </tr> <tr> <td>DC Current Gain</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BC817-16</td> <td></td> <td>100</td> <td>250</td> <td></td> </tr> <tr> <td>BC817-25</td> <td><math>V_{CE} = 1V</math> <math>I_C = 100mA</math></td> <td>160</td> <td>400</td> <td></td> </tr> <tr> <td>BC817-40</td> <td></td> <td>250</td> <td>600</td> <td></td> </tr> <tr> <td>Min. DC Current Gain</td> <td><math>V_{CE} = 1V</math> <math>I_C = 500mA</math></td> <td><math>h_{FE}</math></td> <td>40</td> <td></td> </tr> </tbody> </table>	Electrical Characteristics (at $T_a = 25^\circ C$ unless otherwise noted)					PARAMETER	SYMBOL	Min	Max	UNIT	Collector-Base Breakdown Voltage $I_C = 10\mu A$ $I_E = 0$	$V_{CB0}$		50	V	Collector-Emitter Breakdown Voltage $I_C = 10mA$ $I_E = 0$	$V_{CE0}$		45	V	Emitter-Base Breakdown Voltage $I_E = 1\mu A$ $I_C = 0$	$V_{EB0}$		5	V	Collector Cut-off Current $V_{CB} = 45V$ $I_E = 0$	$I_{CBO}$		0.1	$\mu A$	Emitter Cut-off Current $V_{EB} = 4V$ $I_C = 0$	$I_{EBO}$		0.1	$\mu A$	Collector-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{CE(sat)}$		0.7	V	Base-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{BE(sat)}$		1.2	V	Transition Frequency $V_{CE} = 5V$ $I_C = 10mA$ $f = 100MHz$	$f_T$		100	MHz	Junction Capacitance $V_{CB} = 10V$ $f = 1.0MHz$	$C_{CB0}$		10	pF	DC Current Gain					BC817-16		100	250		BC817-25	$V_{CE} = 1V$ $I_C = 100mA$	160	400		BC817-40		250	600		Min. DC Current Gain	$V_{CE} = 1V$ $I_C = 500mA$	$h_{FE}$	40		
PARAMETER	SYMBOL	BC817-16	BC817-25	BC817-40	UNIT																																																																																																																																																																								
Collector-Base Breakdown Voltage $I_C = 10\mu A$ $I_E = 0$	$V_{CB0}$	50			V																																																																																																																																																																								
Collector-Emitter Breakdown Voltage $I_C = 10mA$ $I_E = 0$	$V_{CE0}$	45			V																																																																																																																																																																								
Emitter-Base Breakdown Voltage $I_E = 1\mu A$ $I_C = 0$	$V_{EB0}$	5			V																																																																																																																																																																								
Collector Cut-off Current $V_{CB} = 45V$ $I_E = 0$	$I_{CBO}$	0.1			$\mu A$																																																																																																																																																																								
Emitter Cut-off Current $V_{EB} = 4V$ $I_C = 0$	$I_{EBO}$	0.1			$\mu A$																																																																																																																																																																								
Collector-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{CE(sat)}$	0.7			V																																																																																																																																																																								
Base-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{BE(sat)}$	1.2			V																																																																																																																																																																								
Transition Frequency $V_{CE} = 5V$ $I_C = 10mA$ $f = 100MHz$	$f_T$	100			MHz																																																																																																																																																																								
Junction Capacitance $V_{CB} = 10V$ $f = 1.0MHz$	$C_{CB0}$	10			pF																																																																																																																																																																								
DC Current																																																																																																																																																																													
$V_{CE} = 1V$ $I_C = 100mA$	$h_{FE}$	100	400	600																																																																																																																																																																									
$V_{CE} = 1V$ $I_C = 100mA$		>40	160	250																																																																																																																																																																									
DC Current Gain		100-250	160-400	250-600																																																																																																																																																																									
Min. DC Current Gain	$V_{CE} = 1V$ $I_C = 500mA$	$h_{FE}$	40																																																																																																																																																																										
Electrical Characteristics (at $T_a = 25^\circ C$ unless otherwise noted)																																																																																																																																																																													
PARAMETER	SYMBOL	Min	Max	UNIT																																																																																																																																																																									
Collector-Base Breakdown Voltage $I_C = 10\mu A$ $I_E = 0$	$V_{CB0}$		50	V																																																																																																																																																																									
Collector-Emitter Breakdown Voltage $I_C = 10mA$ $I_E = 0$	$V_{CE0}$		45	V																																																																																																																																																																									
Emitter-Base Breakdown Voltage $I_E = 1\mu A$ $I_C = 0$	$V_{EB0}$		5	V																																																																																																																																																																									
Collector Cut-off Current $V_{CB} = 45V$ $I_E = 0$	$I_{CBO}$		0.1	$\mu A$																																																																																																																																																																									
Emitter Cut-off Current $V_{EB} = 4V$ $I_C = 0$	$I_{EBO}$		0.1	$\mu A$																																																																																																																																																																									
Collector-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{CE(sat)}$		0.7	V																																																																																																																																																																									
Base-Emitter Saturation Voltage $I_C = 500mA$ $I_E = 50 mA$	$V_{BE(sat)}$		1.2	V																																																																																																																																																																									
Transition Frequency $V_{CE} = 5V$ $I_C = 10mA$ $f = 100MHz$	$f_T$		100	MHz																																																																																																																																																																									
Junction Capacitance $V_{CB} = 10V$ $f = 1.0MHz$	$C_{CB0}$		10	pF																																																																																																																																																																									
DC Current Gain																																																																																																																																																																													
BC817-16		100	250																																																																																																																																																																										
BC817-25	$V_{CE} = 1V$ $I_C = 100mA$	160	400																																																																																																																																																																										
BC817-40		250	600																																																																																																																																																																										
Min. DC Current Gain	$V_{CE} = 1V$ $I_C = 500mA$	$h_{FE}$	40																																																																																																																																																																										