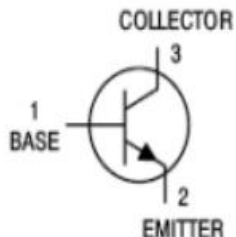
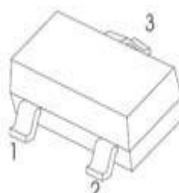


TRANSISTOR (NPN)	SOT-23 Plastic-Encapsulate Transistors																																				
<u>SOT-23</u>  1.BASE 2.EMITTER 3.COLLECTOR	Features • For general AF applications • High collector current • High current gain • Low collector-emitter saturation voltage • Complementary types: BC807 (PNP)																																				
MAXIMUM RATINGS (Ta=25℃ unless otherwise noted) <table><tr><th>Parameter</th><th>Symbol</th><th>Value</th><th>Unit</th></tr><tr><td>Collector-Base Voltage</td><td>VCBO</td><td>50</td><td>V</td></tr><tr><td>Collector-Emitter Voltage</td><td>VCEO</td><td>45</td><td>V</td></tr><tr><td>Emitter-Base Voltage</td><td>VEBO</td><td>5</td><td>V</td></tr><tr><td>Collector Current -Continuous</td><td>IC</td><td>500</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>PC</td><td>300</td><td>mW</td></tr><tr><td>Thermal Resistance From Junction To Ambient</td><td>RθJA</td><td>417</td><td>℃/W</td></tr><tr><td>Junction Temperature</td><td>Tj</td><td>150</td><td>℃</td></tr><tr><td>Storage Temperature</td><td>Tstg</td><td>-55~+150</td><td>℃</td></tr></table>		Parameter	Symbol	Value	Unit	Collector-Base Voltage	VCBO	50	V	Collector-Emitter Voltage	VCEO	45	V	Emitter-Base Voltage	VEBO	5	V	Collector Current -Continuous	IC	500	mA	Collector Power Dissipation	PC	300	mW	Thermal Resistance From Junction To Ambient	RθJA	417	℃/W	Junction Temperature	Tj	150	℃	Storage Temperature	Tstg	-55~+150	℃
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ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 10μA, IE=0	50			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 10 mA, IB=0	45			V
Emitter-base breakdown voltage	V(BR)EBO	IE=1μA, IC=0	6			V
Collector cut-off current	ICBO	VCE= 45 V , IB=0			0.1	μA
Collector cut-off current	ICEO	VCB= 40V , IE=0			1	μA
Emitter cut-off current	IEBO	VEB= 5V , IC=0			0.1	μA
DC current gain	hFE	VCE= 1V, IC= 100mA	100		600	
	hFE	VCE= 1V, IC= 500mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC= 500mA, IB= 5mA			0.7	V
Base-emitter saturation voltage	VBE(sat)	IC= 500 mA, IB= 5mA			1.2	V
Transition frequency	fT	VCE= 5V, IC= 10mA f=100MHz	100			MHz
Collector output capacitance	Cob	VCB=10V, IE=0, f=1MHz		10		PF

CLASSIFICATION OF hFI

Rank	BC817-16	BC817-25	BC817-40
Range	100-250	160-400	250-600
Marking	6A	6B	6C

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

