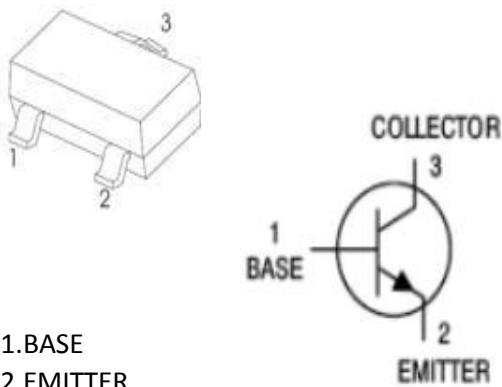
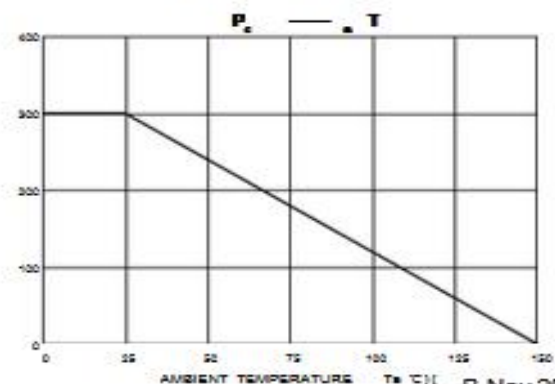
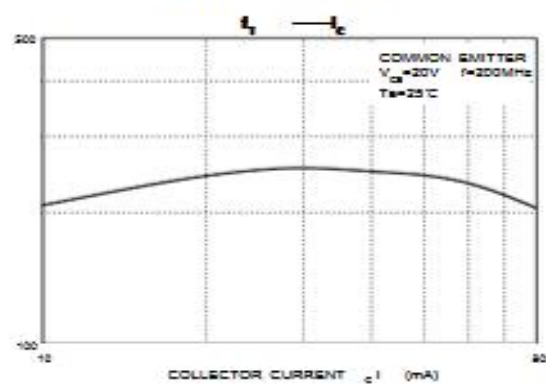
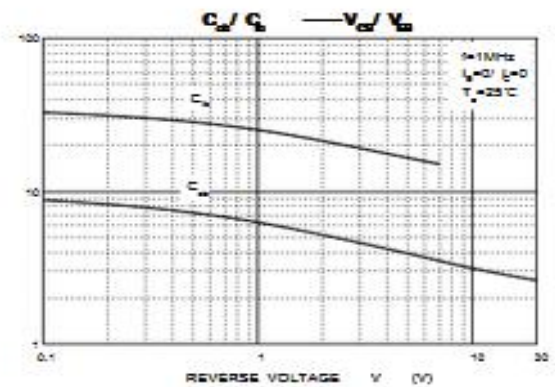
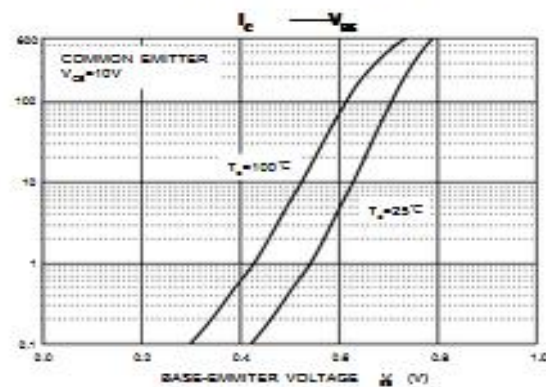
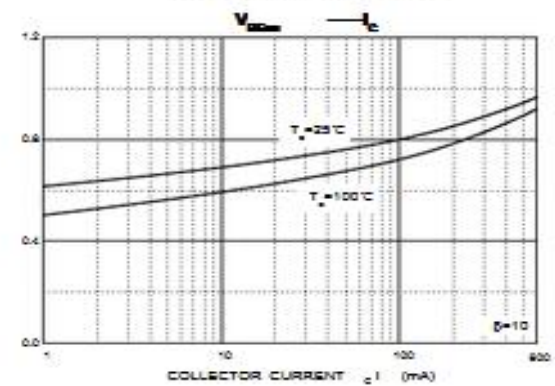
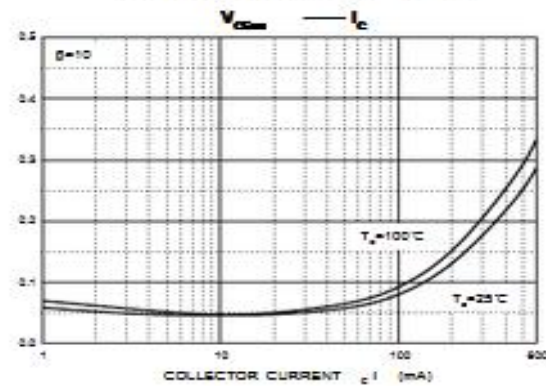
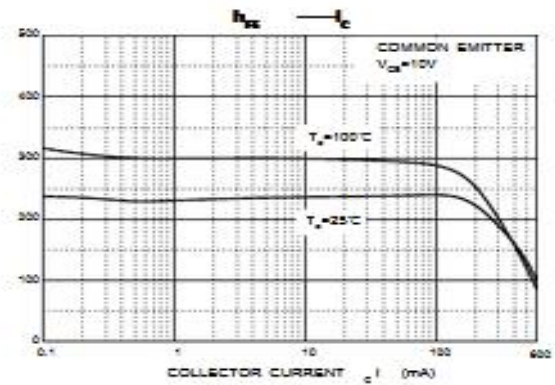
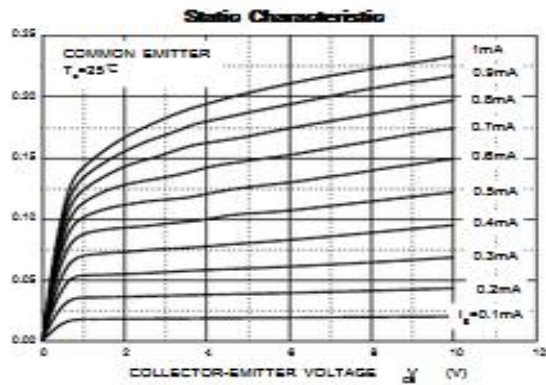


TRANSISTOR (NPN)	SOT-23 Plastic-Encapsulate Transistors																																				
<u>SOT-23</u>  1.BASE 2.EMITTER 3.COLLECTOR Marking :1P	Features ※ Complementary PNP Type available MMBT2907A ※ Collector Current: $I_c=0.6A$ ※ Epitaxial Planar die construction																																				
MAXIMUM RATINGS ($T_a=25^{\circ}C$ 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>V_{CB0}</td><td>75</td><td>V</td></tr><tr><td>Collector-Emitter Voltage</td><td>V_{CE0}</td><td>40</td><td>V</td></tr><tr><td>Emitter-Base Voltage</td><td>V_{EB0}</td><td>6</td><td>V</td></tr><tr><td>Collector Current</td><td>I_C</td><td>600</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>P_C</td><td>300</td><td>mW</td></tr><tr><td>Thermal Resistance From Junction To Ambient</td><td>$R_{\theta JA}$</td><td>417</td><td>$^{\circ}C/W$</td></tr><tr><td>Junction Temperature</td><td>T_j</td><td>150</td><td>$^{\circ}C$</td></tr><tr><td>Storage Temperature</td><td>T_{stg}</td><td>$-55\sim+150$</td><td>$^{\circ}C$</td></tr></table>		Parameter	Symbol	Value	Unit	Collector-Base Voltage	V_{CB0}	75	V	Collector-Emitter Voltage	V_{CE0}	40	V	Emitter-Base Voltage	V_{EB0}	6	V	Collector Current	I_C	600	mA	Collector Power Dissipation	P_C	300	mW	Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	417	$^{\circ}C/W$	Junction Temperature	T_j	150	$^{\circ}C$	Storage Temperature	T_{stg}	$-55\sim+150$	$^{\circ}C$
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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= 10 μ A, IE=0	78			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 10mA, IB=0	40			V
Emitter-base breakdown voltage	V(BR)EBO	IE=10 μ A, IC=0	6			V
Collector cut-off current	ICBO	VCB=60 V , IE=0			0.01	μ A
Collector cut-off current	ICEX	VCE=30V , VBE(Off)=3V			0.01	μ A
Emitter cut-off current	IEBO	VEB= 3V , IC=0			0.1	μ A
DC current gain	hFE	VCE=10V, IC= 150mA	100		300	
	hFE	VCE=10V, IC= 0.1mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC=500 mA, IB= 50mA			1	V
Base-emitter saturation voltage	VBE(sat)	IC=500 mA, IB= 50mA			2.0	V
Transition frequency	fT	VCE=20V, IC= 20mA f=100MHz	300			MHz
Delay time	td	VCC=30V, Ic=150mA, IB1=15mA,			10	ns
Rise time	tr				25	ns
Storage time	ts	VCC=30V, Ic=150mA, IB1=15mA,			225	ns
Fall time	tf				60	ns

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



B, Nov, 2011