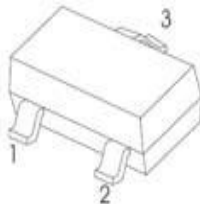


TRANSISTOR (PNP)		SOT-23 Plastic-Encapsulate Transistors																																					
<u>SOT-23</u>  COLLECTOR 3 BASE 1 2 EMITTER 1.BASE 2.EMITTER 3.COLLECTOR Marking :2A Features ※ Complimentary to MMBT3904 ※ Collector Current: Ic=200mA																																							
MAXIMUM RATINGS (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>-40</td><td>V</td></tr><tr><td>Collector-Emitter Voltage</td><td>VCEO</td><td>-40</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</td><td>IC</td><td>-200</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>PC</td><td>200</td><td>mW</td></tr><tr><td>Thermal Resistance From Junction To Ambient</td><td>ROJA</td><td>625</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	-40	V	Collector-Emitter Voltage	VCEO	-40	V	Emitter-Base Voltage	VEBO	-5	V	Collector Current	IC	-200	mA	Collector Power Dissipation	PC	200	mW	Thermal Resistance From Junction To Ambient	ROJA	625	℃/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	-40			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= -1mA, IB=0	-40			V
Emitter-base breakdown voltage	V(BR)EBO	IE= -10μA, IC=0	-5			V
Collector cut-off current	ICBO	VCB= -40 V , IE=0			-0.1	μA
Collector cut-off current	ICEO	VCE=-30V, VBE(off)=-3V			-50	nA
Emitter cut-off current	IEBO	VEB= -6V , IC=0			-0.1	μA
DC current gain	hFE	VCE= -1V, IC= -10mA	100		300	
	hFE	VCE= -1V, IC= -50mA	60			
	hFE	VCE= -1V, IC= -100mA	30			
Collector-emitter saturation voltage	VCE(sat)	IC= -50 mA, IB= -5mA			-0.3	V
Base-emitter saturation voltage	VBE(sat)	IC= -50 mA, IB= -5mA			-0.95	V
Transition frequency	fT	VCE=6V, IC= 20mA f=30MHz	300			MHz
Delay time	td	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			35	ns
Rise time	tr	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			35	ns
Storage time	ts	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			225	ns
Fall time	tf	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			75	ns

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

