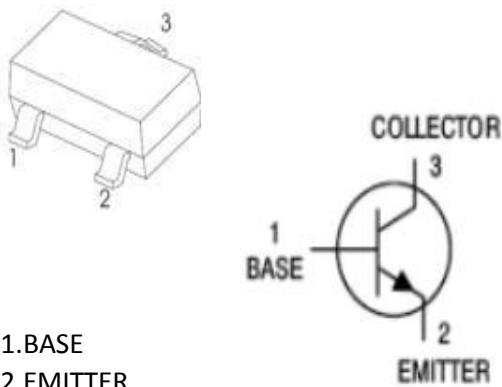


TRANSI STOR (NPN)	SOT-23 Plastic-Encapsulate Transistors																																				
<u>SOT-23</u>  1.BASE 2.EMITTER 3.COLLECTOR Marking :2X	Features ※ Complimentary to MMBT4403 ※ Collector Current: Ic=0.6A ※ Switching Transistor																																				
MAXIMUM RATINGS (Ta=25℃ unless 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>60</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>6</td><td>V</td></tr><tr><td>Collector Current</td><td>IC</td><td>600</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>PC</td><td>250</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	60	V	Collector-Emitter Voltage	VCEO	40	V	Emitter-Base Voltage	VEBO	6	V	Collector Current	IC	600	mA	Collector Power Dissipation	PC	250	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= 100μA, IE=0	60			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 1mA, IB=0	40			V
Emitter-base breakdown voltage	V(BR)EBO	IE= 100μA, IC=0	6		30	V
Collector cut-off current	ICBO	VCB= 60 V , IE=0			0.1	μA
Collector cut-off current	ICEO	VCE= 40V , IB=0			0.1	μA
Emitter cut-off current	IEBO	VEB= 6V , IC=0			0.1	μA
DC current gain	hFE	VCE=5V, IC= 1mA	400			
	hFE	VCE=5V, IC= 10mA	80			
	hFE	VCE=5V, IC= 150mA	100		300	
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	V
Transition frequency	fT	VCE=20V, IC= 100mA f=100MHz	250			MHz
Delay time	td	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			15	ns
Rise time	tr	VCC=3V, VBE=0.5V, IC=10mA, IB=1mA,			20	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,			60	ns

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

