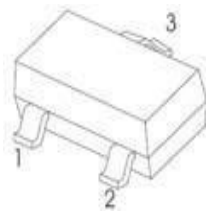
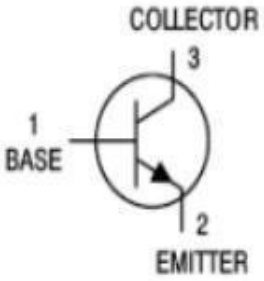
TRANSI STOR (NPN)	SOT-23 Plastic-Encapsulate Transistors

SOT-23





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)

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	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 100μA, IE=0	60		200	V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 1mA, IB=0	40		100	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	VCB= 40V , IE=0			0.1	μA
Emitter cut-off current	IEBO	VEB= 6V , IC=0			0.1	μA
DC current gain	hFE	VCE=5V, IC= 1mA	100		300	
	hFE	VCE=5V, IC= 10mA	80			
	hFE	VCE=5V, IC= 100mA	60			
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

CLASSIFICATION OF HFE

HFE	**100-300**	
Rank	**L**	**H**
Range	**100-200**	**200-300**

TYPICAL ELEC TRICAL AND THERMAL CHARACTERISTICS