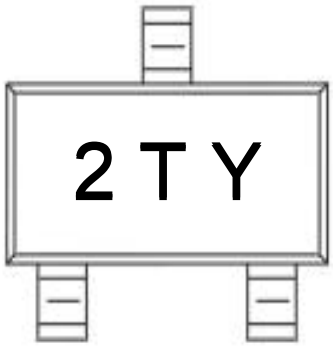
S8550

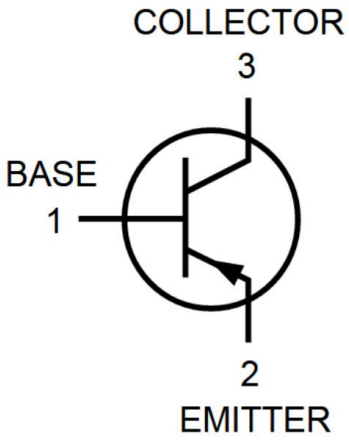
SOT-23 Plastic-Encapsulate Transistors

TRANSI STOR (PNP)

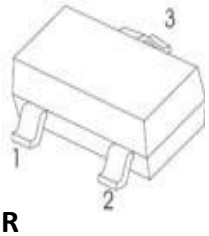
MARKING:



Equivalent Circuit:



SOT-23



1.BASE
2.EMITTER
3.COLLECTOR

FEATURES:

※ Complimentary to S8050
※ Collector Current: Ic=0.5A

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	-40	V
Collector-Emitter Voltage	VCEO	-25	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	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	℃

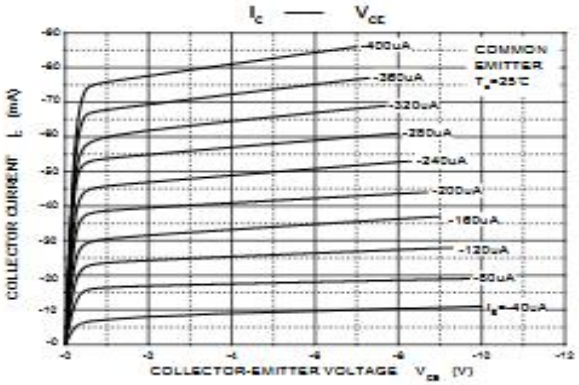
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

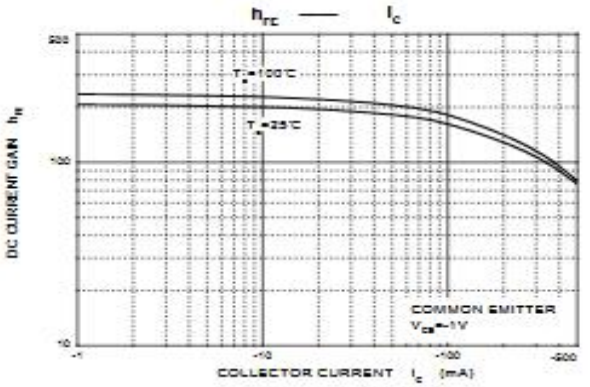
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= -100μA, IE=0	-40			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= -1mA, IB=0	-25			V
Emitter-base breakdown voltage	V(BR)EBO	IE= -100μA, IC=0	-5			V
Collector cut-off current	ICBO	VCB= -40 V , IE=0			-0.1	μA
Collector cut-off current	ICEO	VCB= -25V , IE=0			-0.1	μA
Emitter cut-off current	IEBO	VEB= -5V , IC=0			-0.1	μA
DC current gain	hFE	VCE=-1V, IC= -50mA	120		400	
	hFE	VCE=-1V, IC= -500mA	50			
Collector-emitter saturation voltage	VCE(sat)	IC= -500 mA, IB= -50mA			-0.6	V
Base-emitter saturation voltage	VBE(sat)	IC= -500 mA, IB= -50mA			-1.2	V
Transition frequency	fT	VCE=-6V, IC= -20mA f=30MHz	150			MHz

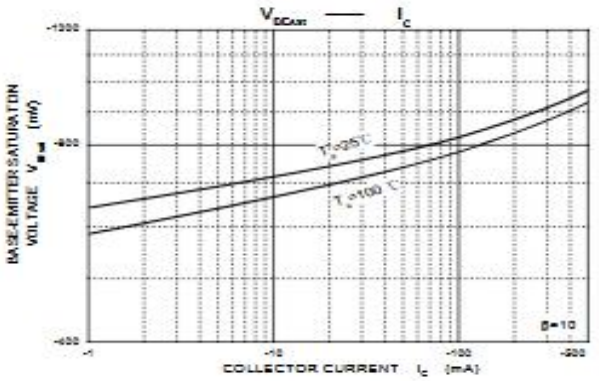
CLASSIFICATION OF hFE

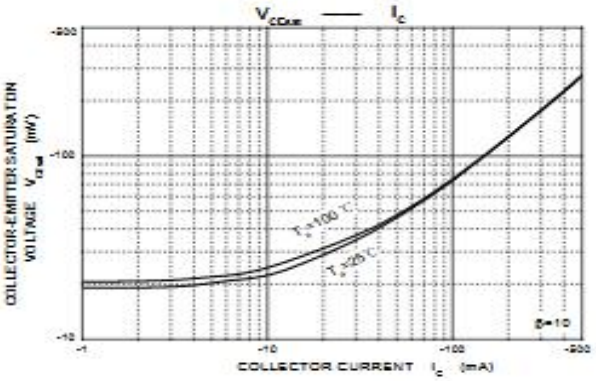
Rank	L	H	J
Range	120-200	200-350	300-400
MARKING:		2TY	

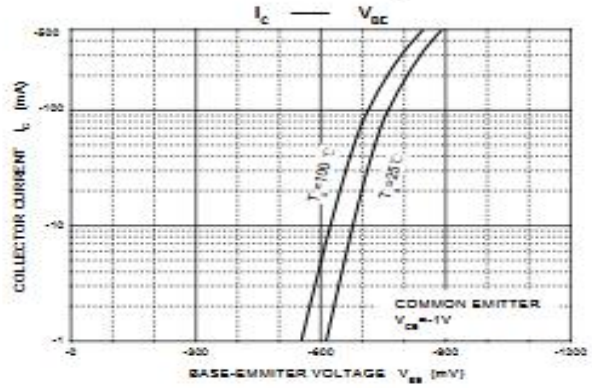
TYPICAL ELEC TRICAL AND THERMAL CHARACTERISTICS

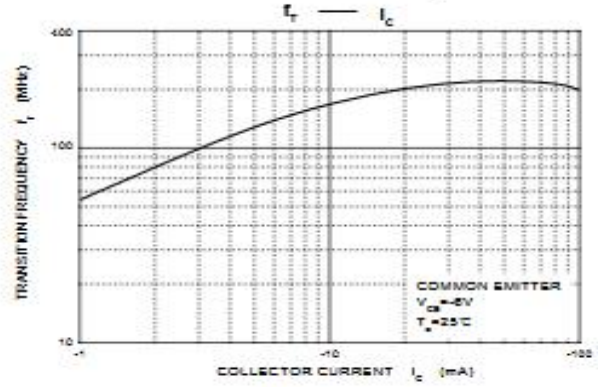


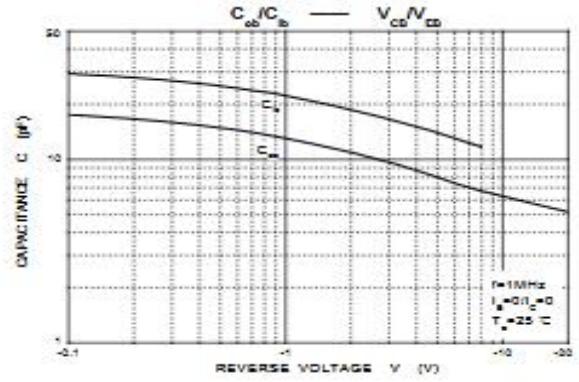


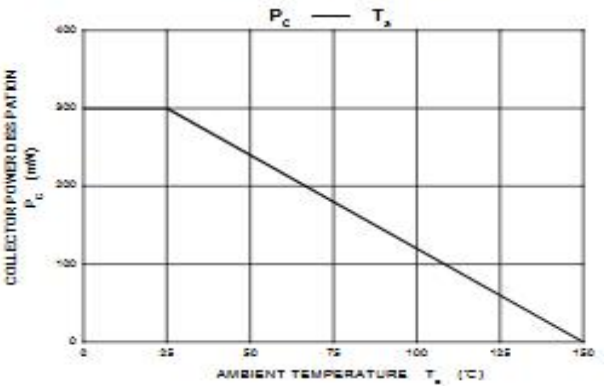




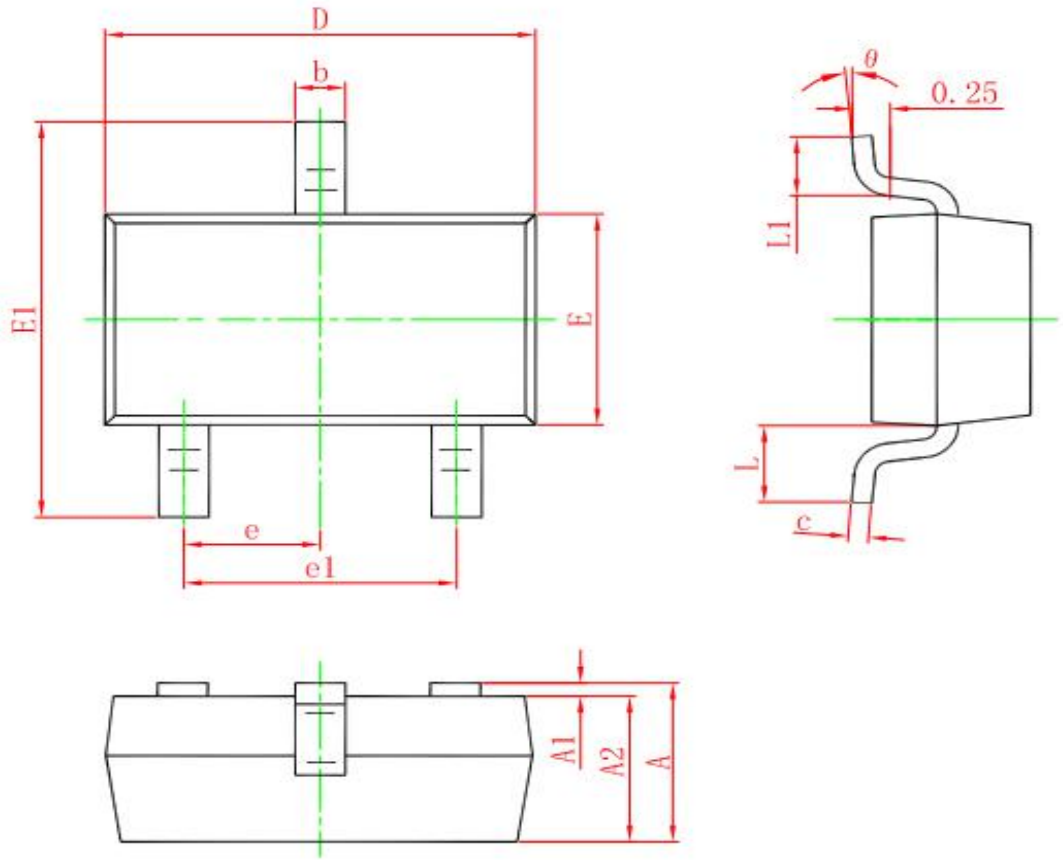








SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Flow (wave) soldering (solder dipping)

Product	Peak Temperature	Dipping Time
Pb device	245℃±5℃	5sec±1sec
Pb-Free device	260℃+0/-5℃	5sec±1sec

This integrated circuit can be damaged by ESD BYSEMI Corporation recommends that all integrated circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedure can cause damage. ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.