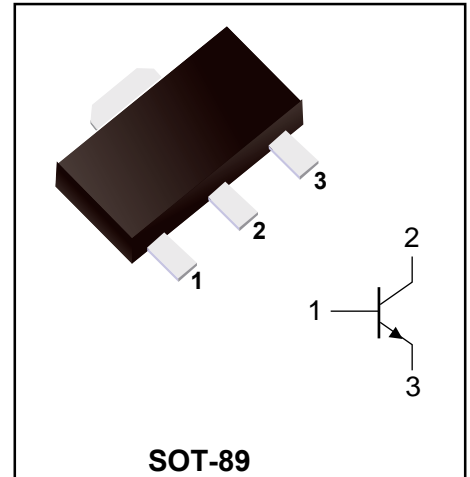


**Plastic-Encapsulate Transistors**  
**NPN TRANSISTOR**



**SOT-89**

**Marking Code**

**PBSS4350SI**

**A3 JY**

**FEATURES**

- ◆ Low collector-to-emitter saturation voltage.
- ◆ Fast switching speed.
- ◆ Large current capacity and wide ASO.
- ◆ We declare that the material of product compliance with RoHS requirements and Halogen Free.

**Absolute Maximum Ratings (Ta = 25°C)**

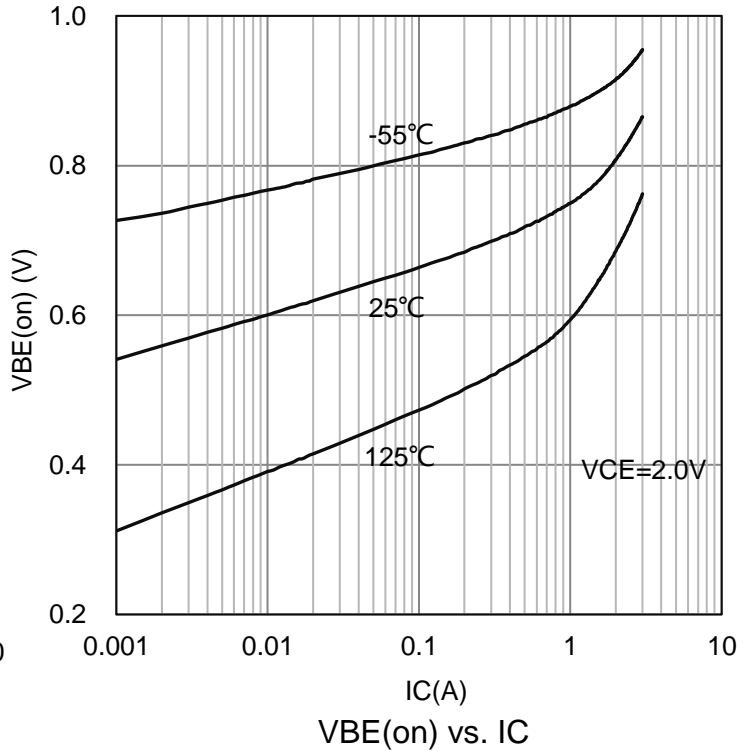
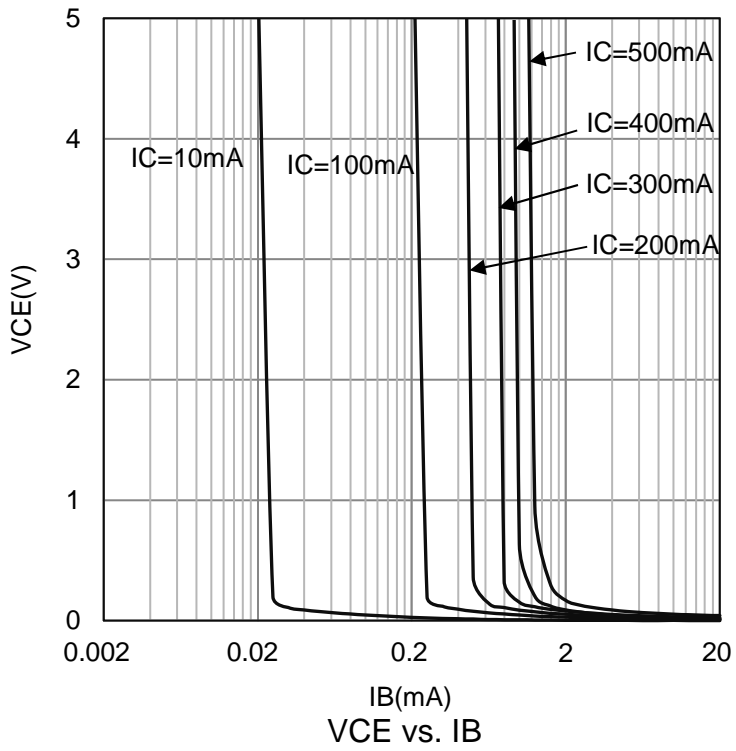
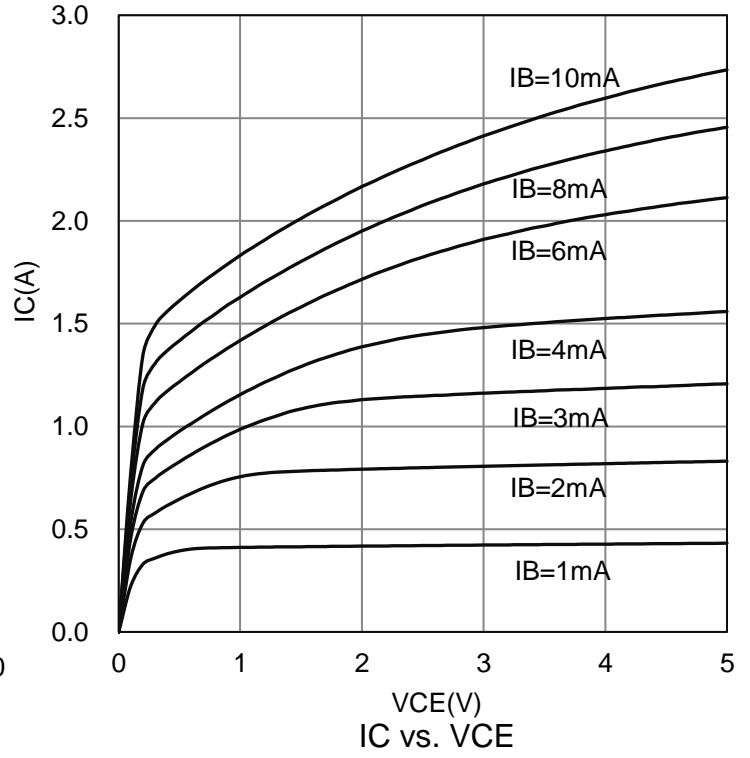
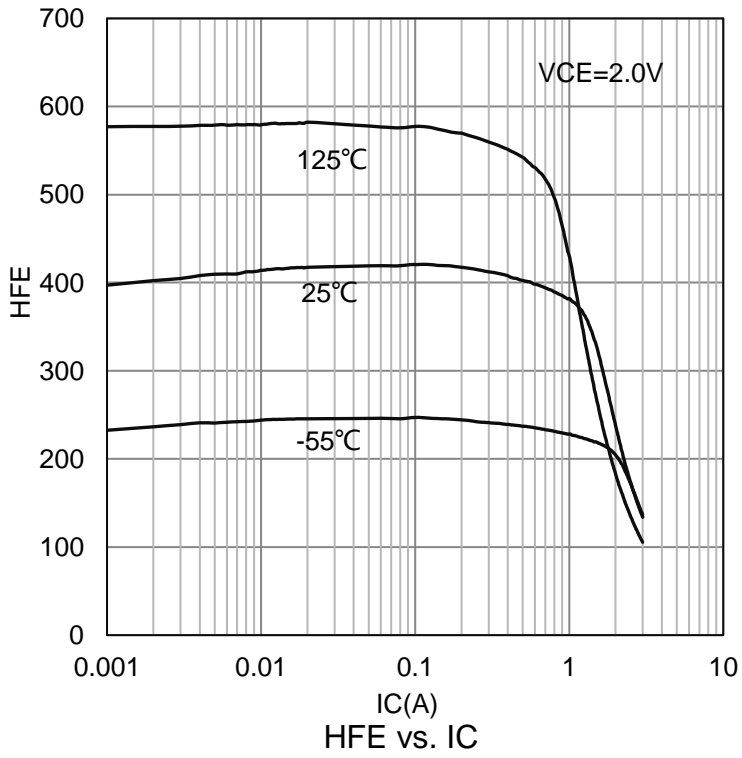
Parameter	Symbol	Value	Unit
Collector - Base Voltage	<b>VCBO</b>	60	<b>V</b>
Collector - Emitter Voltage	<b>VCEO</b>	50	<b>V</b>
Emitter - Base Voltage	<b>VEBO</b>	6	<b>V</b>
Collector Current	<b>Ic</b>	3	<b>A</b>
Collector Current(Pulse)	<b>IcP</b>	6	<b>A</b>
Collector Power Dissipation FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C	<b>PD</b>	550 4.4	<b>mW</b> <b>mW/°C</b>
Thermal Resistance From Junction-To- Ambient	<b>RθJA</b>	225	<b>°C/W</b>
Junction Temperature	<b>TJ</b>	150	<b>°C</b>
Storage Temperature Range	<b>TSTG</b>	-55 to 150	

1.PCB Size:30.0mm×25.0mm×1.6mm,FR-4 Board;

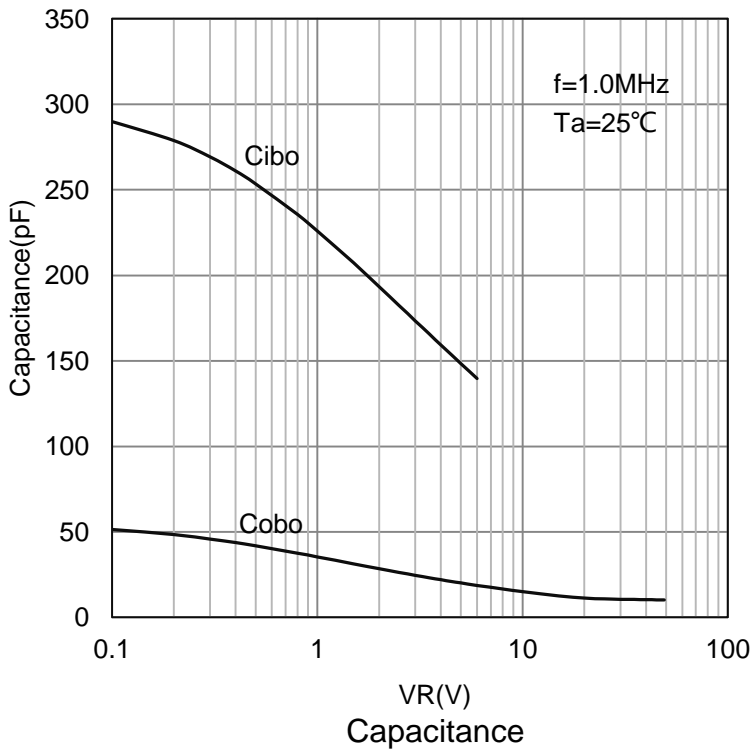
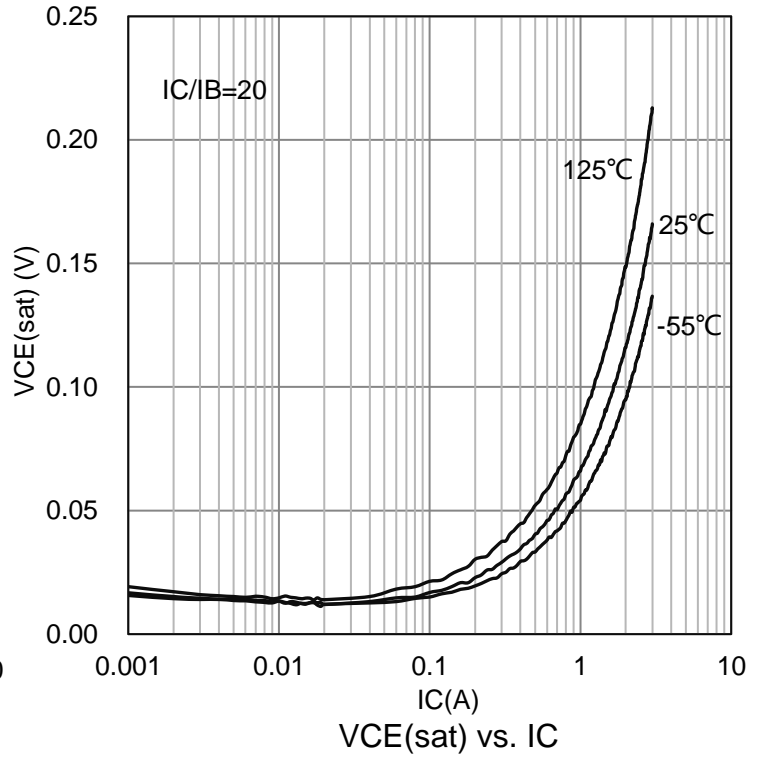
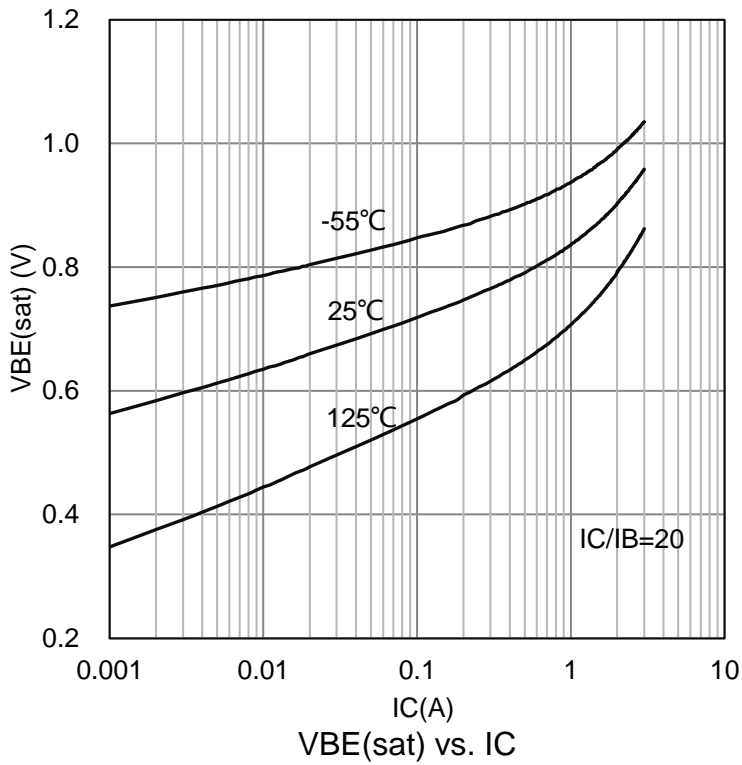
**ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Collector-base cut-off current	V <sub>CB</sub> =40V, I <sub>E</sub> =0	<b>ICBO</b>	-	-	1	<b>μA</b>
Emitter cut-off current	V <sub>EB</sub> =4V, I <sub>C</sub> =0	<b>IEBO</b>	-	-	1	
Collector-emitter saturation voltage	I <sub>C</sub> =2A, I <sub>B</sub> =100mA	<b>VCE(sat)</b>	-	0.19	0.5	<b>V</b>
Base - emitter saturation voltage	I <sub>C</sub> =2A, I <sub>B</sub> =100mA	<b>VBE(sat)</b>	-	0.94	1.2	
DC current gain	V <sub>CE</sub> =2V, I <sub>C</sub> =100mA	<b>hFE</b>	200	-	500	
	V <sub>CE</sub> =2V, I <sub>C</sub> =3A	<b>hFE</b>	35	-	-	
output capacitance	V <sub>CB</sub> = 10 V, f = 1.0 MHz, I <sub>E</sub> =0	<b>Cob</b>	-	25	-	<b>pF</b>
Transition frequency	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	<b>fr</b>	-	150	-	<b>MHz</b>

**ELECTRICAL CHARACTERISTICS CURVES**



**ELECTRICAL CHARACTERISTICS CURVES**



**Ordering information**

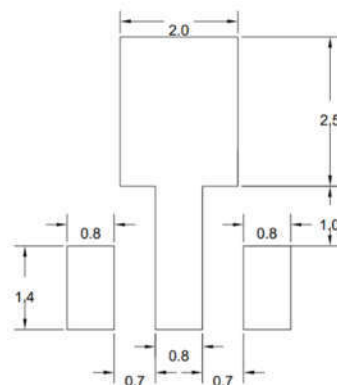
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

**Package Dimensions**

**SOT-89**

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

**The recommended mounting pad size**



UNIT:MM

## Disclaimer

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