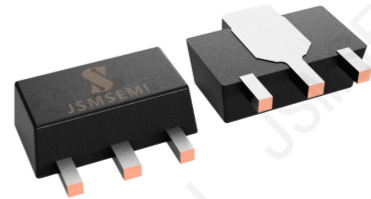


FEATURES

- ◆ Adoption of MBIT processes.
- ◆ Low collector-to-emitter saturation voltage.
- ◆ Fast switching speed.
- ◆ Large current capacity and wide ASO.
- ◆ Complementary to PBSS5350X-JSM



SOT-89

MAXIMUM RATING (Ta=25℃)

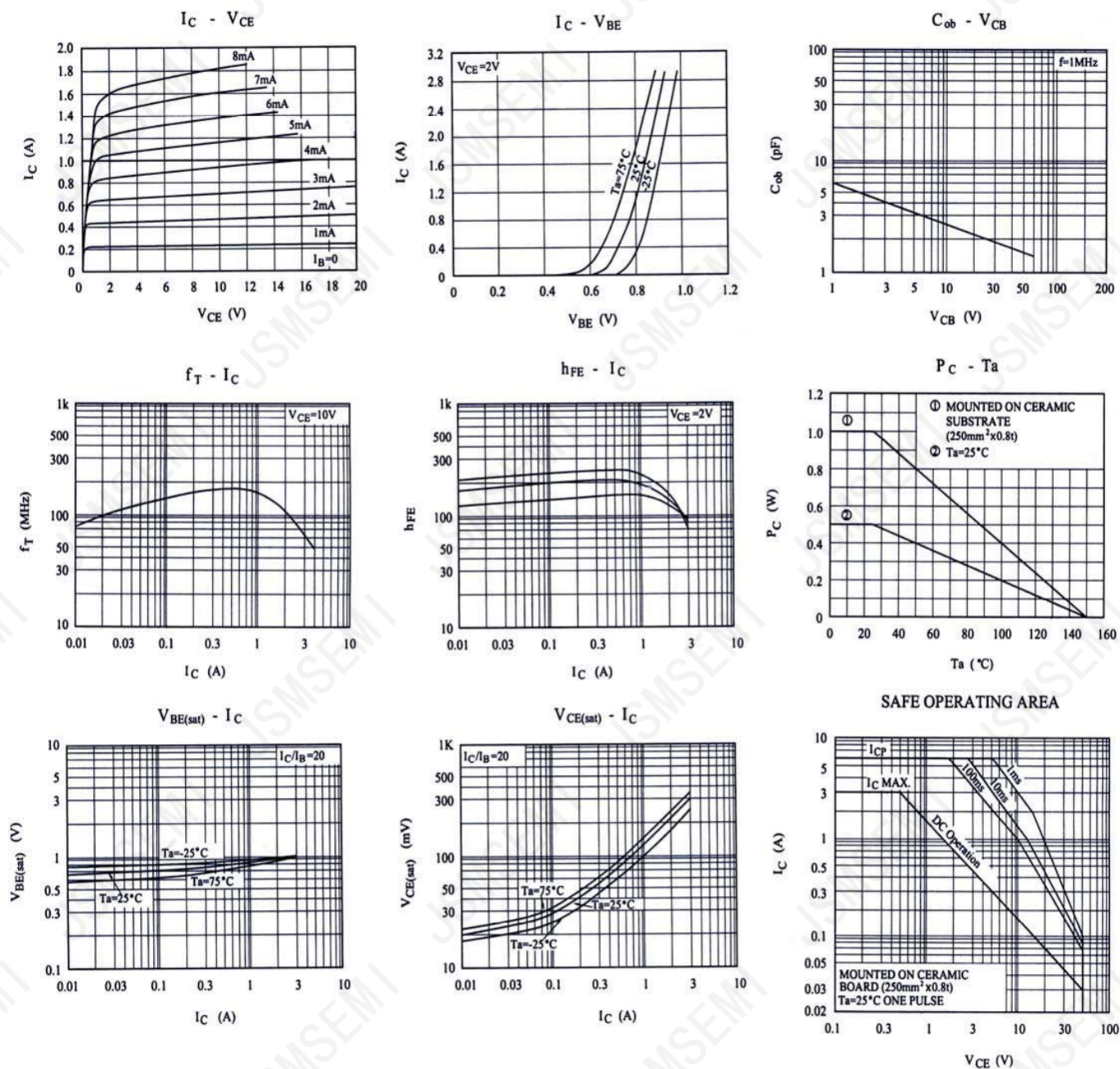
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CE0}	50	V
Emitter-Base Voltage	V _{EB0}	6	V
Collector Current	I _c	3	A
Collector Current(Pulse)	I _{CP}	6	A
Collector Power Dissipation	P _c	500	mW
	P _c *	1	W
Junction Temperature	T _j	150	℃
Storage Temperature Range	T _{stg}	-55~150	℃

* : Package mounted on ceramic substrate(250mm²0.8t)×

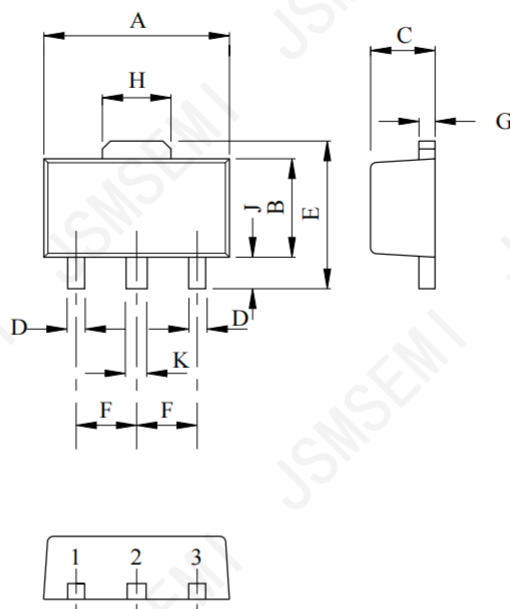
Electrical characteristics(Ta=25℃)

Symbol	Test condition	Rating			Unit
		Min	Typ	Max	
V _{CB0}	I _c =10μA I _E =0	60			V
V _{CE0}	I _c =1.0mA I _B =0	50			V
V _{EB0}	I _E =10μA I _c =0	6.0			V
I _{CB0}	V _{CB} =40V I _E =0			1.0	μA
I _{EB0}	V _{EB} =4.0V I _c =0			1.0	μA
h _{FE} (1)	V _{CE} =2.0V I _c =100mA	100		400	
h _{FE} (2)	V _{CE} =2.0V I _c =3.0A	35			
V _{CE(sat)}	I _c =2.0A I _B =100mA		0.19	0.5	V
V _{BE(sat)}	I _c =2.0A I _B =100mA		0.94	1.2	V
f _r	V _{CE} =10V I _c =50mA		150		MHz
C _{cb}	V _{CB} =10V I _E =0 f=1MHz		25		pF
t _{on}	101B~101B I _c =1.0A		70		nS
t _{stg}			650		nS
t _f			35		nS

Electrical characteristic curves



SOT-89



DIM	MILLIMETERS
A	4.70 MAX
B	2.50±0.20
C	1.70 MAX
D	0.45+0.15/-0.10
E	4.25 MAX
F	1.50±0.10
G	0.40 TYP
H	1.7 MAX
J	0.7 MIN
K	0.5+0.15/-0.10

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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