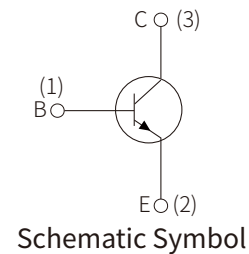


FEATURES

- | Low equivalent on-resistance

- | Power Dissipation of 250mW

- | High Stability and High Reliability



MECHANICAL DATA

- | SOT-23 small outline plastic package

- | Epoxy UL: 94V-0

- | Mounting position: Any

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

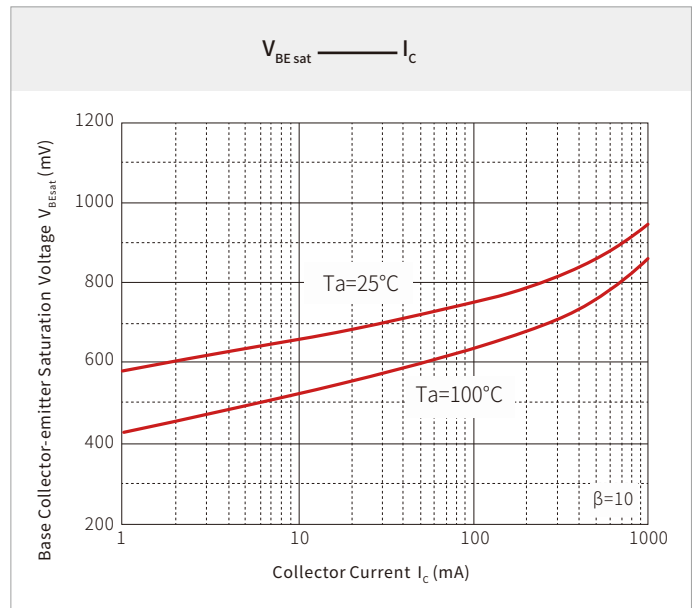
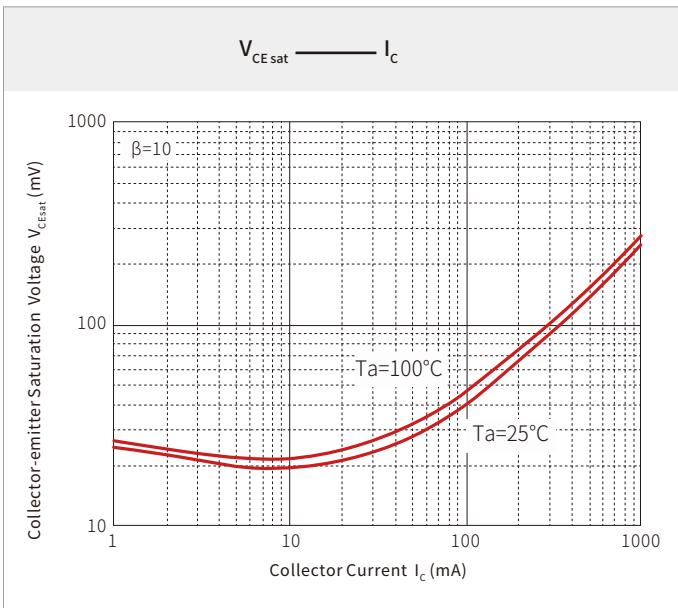
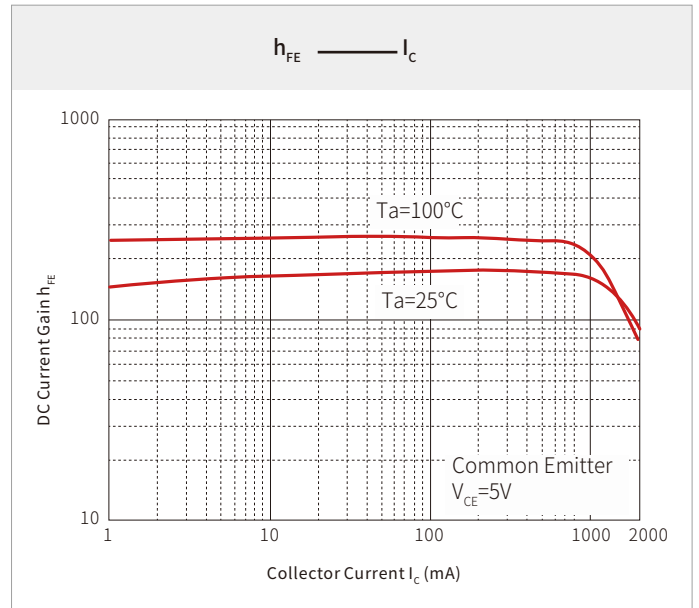
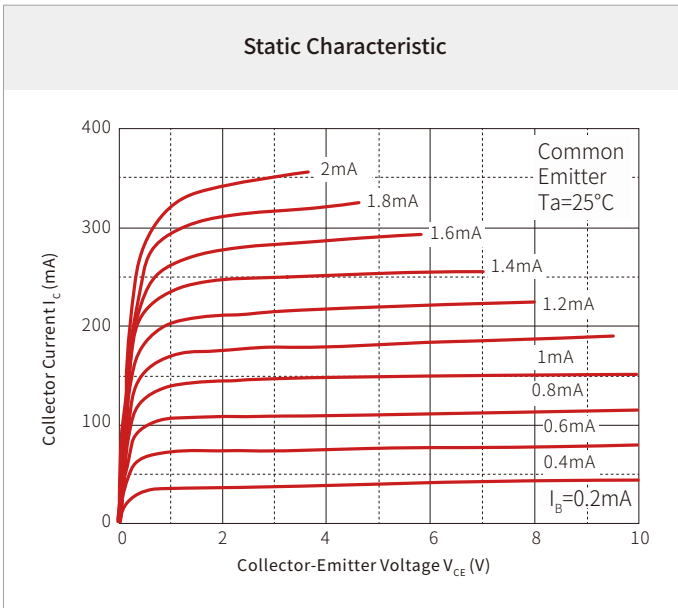
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	60	
Emitter-Base Voltage	V_{EBO}	5	
Collector Current-Continuous	I_C	1.0	A
Peak Pulse Current	I_{CM}	2.0	A
Collector Power Dissipation	P_C	250	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^{\circ}\text{C}$

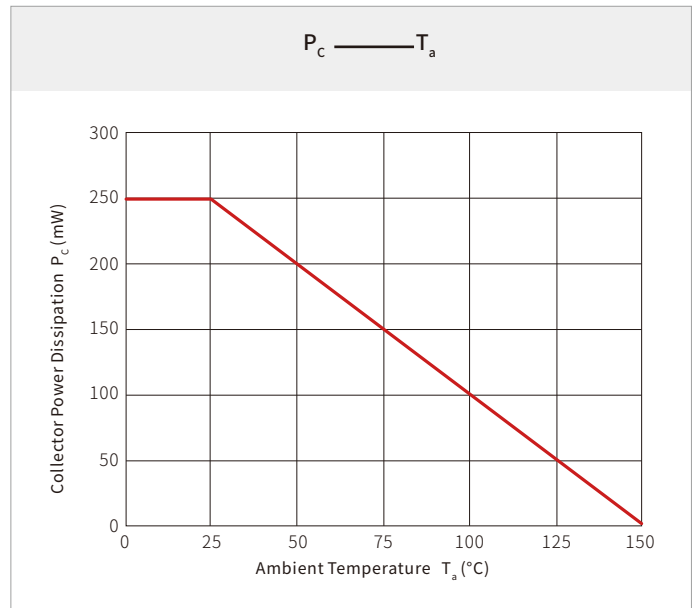
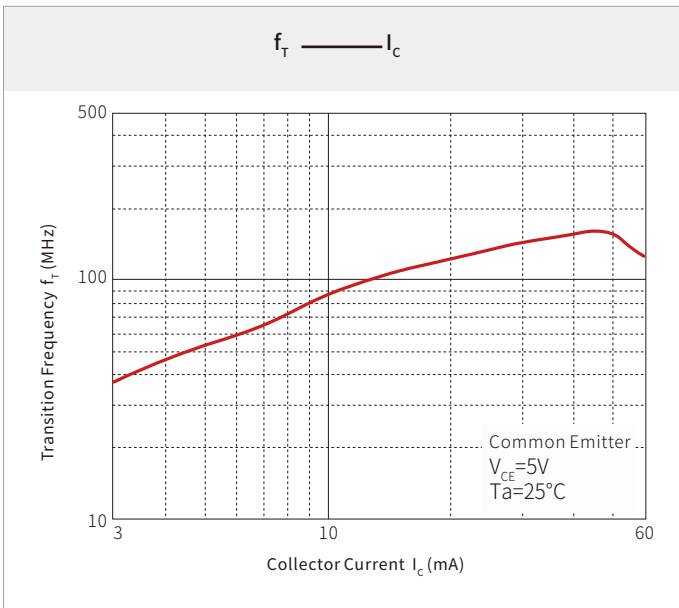
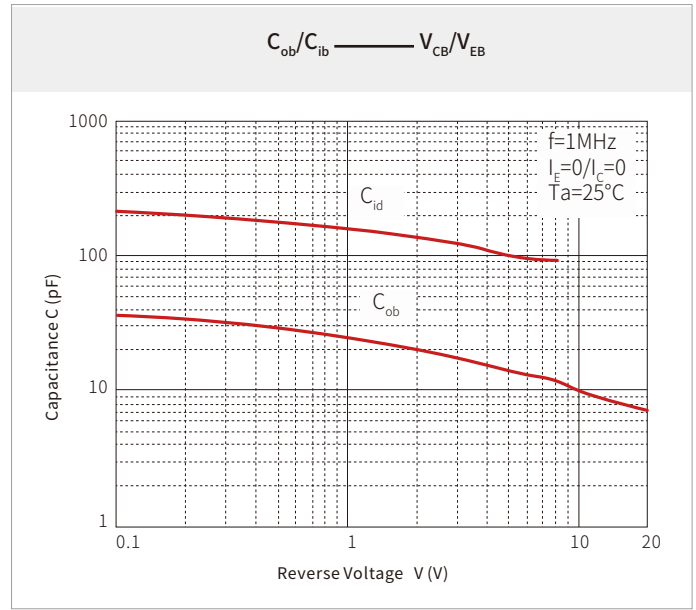
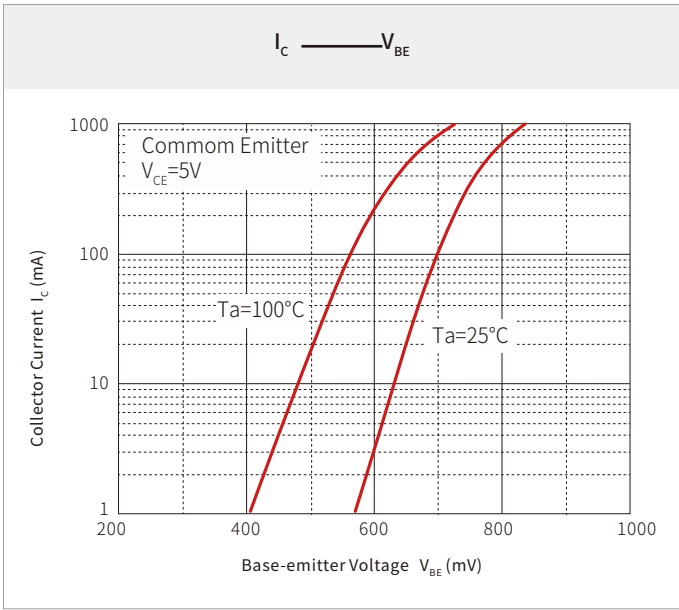
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100uA, I _E =0	80			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C =10mA, I _B =0	60			
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100uA, I _C =0	5			
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			100	
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =1mA		100		
	h _{FE(2)} *	V _{CE} =5V, I _C =500mA		100	300	
	h _{FE(3)} *	V _{CE} =5V, I _C =1000mA		80		
	h _{FE(4)} *	V _{CE} =5V, I _C =2000mA		30		
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =500mA, I _B =50mA			0.25	V
		I _C =1000mA, I _B =100mA			0.50	
Base-emitter saturation voltage	V _{BE(sat)} *	I _C =1000mA, I _B =100mA			1.10	
Base-emitter voltage	V _{BE} *	V _{CE} =5V, I _C =1000mA			1.00	
Transition frequency	f _T	V _{CE} =10V, I _C =50mA, f=100MHz	150			MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, f=1MHz			10	pF

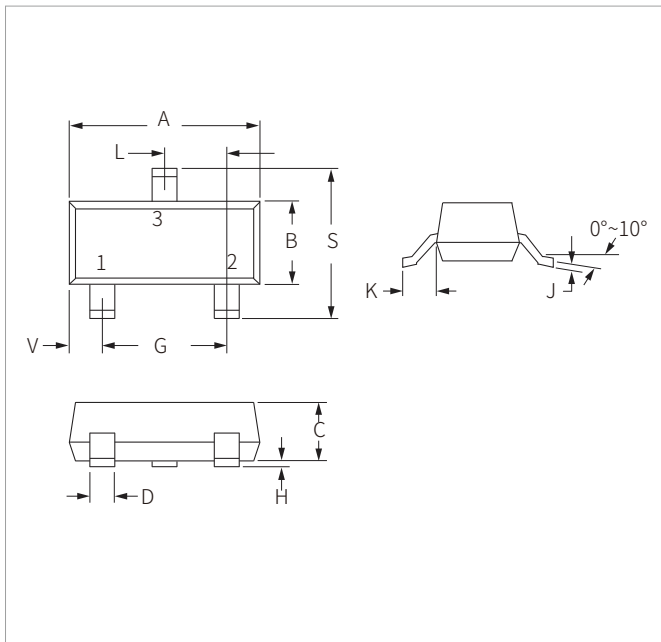
* Measured under pulsed conditions, Pulse width=300us, Duty cycle≤2%

TYPICAL CHARACTERISTICS



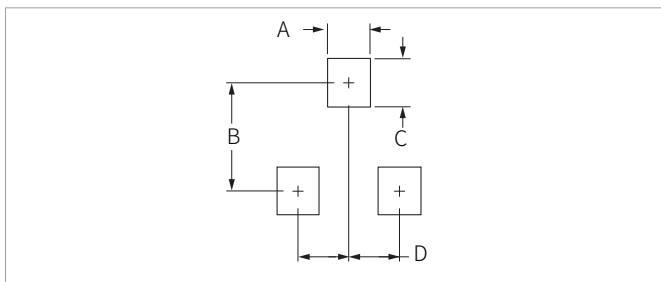


SOT-23 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.05	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.90	1.15	0.035	0.045
D	0.37	0.50	0.015	0.020
G	1.75	2.05	0.069	0.081
H	0.01	0.100	0.001	0.004
J	0.085	0.180	0.003	0.007
K	0.35	0.69	0.014	0.029
L	0.89	1.02	0.035	0.040
S	2.10	2.65	0.083	0.104
V	0.45	0.60	0.018	0.024

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.71	0.97	0.028	0.038
B	1.88	2.13	0.074	0.084
C	0.71	0.97	0.028	0.038
D	0.81	1.07	0.032	0.042

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
FMMT491	SOT-23	3000PCS	7"

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By QR Code

Website



Wechat

To find your local partner within Semiware' s global website: www.semiware.com

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