

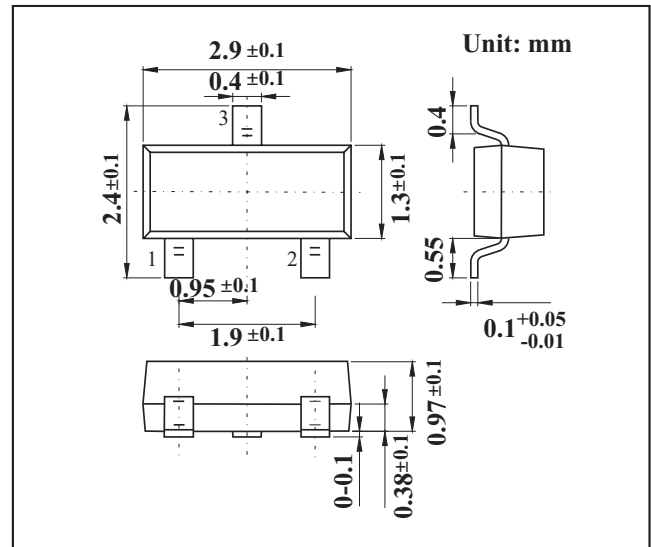
SOT-23 Plastic-Encapsulate Transistors

Features

- 400 Volt VCEO

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	400	V
Collector-emitter voltage	V _{CEO}	400	V
Emitter-base voltage	V _{EB0}	5	V
Peak collector current	I _{CM}	1	A
Collector current	I _C	225	mA
Base current	I _B	200	mA
Power dissipation	P _{tot}	500	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

PACKAGE INFORMATION

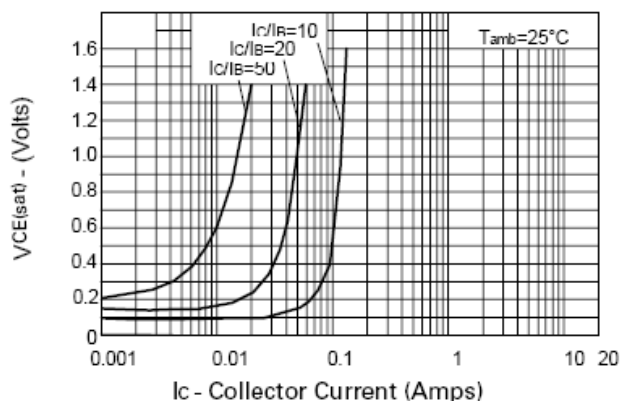
Device	Package	Shipping
FMMT458	SOT-23	3000/Tape&Reel

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA	400			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA	400			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA	5			V
Collector cutoff current	I _{CBO}	V _{CB} =320V			100	nA
Collector Cut-Off Current	I _{CES}	V _{CE} =320V			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V			100	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =20mA, I _B =2mA			0.2	V
		I _C =50mA, I _B =6mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =50mA, I _B =5mA			0.9	V
Base-emitter turn on voltage	V _{BE(on)}	I _C =50mA, V _{CE} =10V			0.9	V
Static Forward Current Transfer Ratio	h _{FE}	I _C =1mA, V _{CE} =10V	100			
		I _C =50mA, V _{CE} =10V*	100		300	
		I _C =100mA, V _{CE} =10V*	15			
Transition frequency	f _T	I _C =10mA, V _{CE} =20V, f=20MHz	50			MHz
Output capacitance	C _{obo}	V _{CB} =20V, f=1MHz			5	pF
Switching times	t _{on}	I _C =50mA, V _{CC} =100V		135		ns
	t _{off}	I _{B1} =5mA, I _{B2} =-10mA		2260		ns

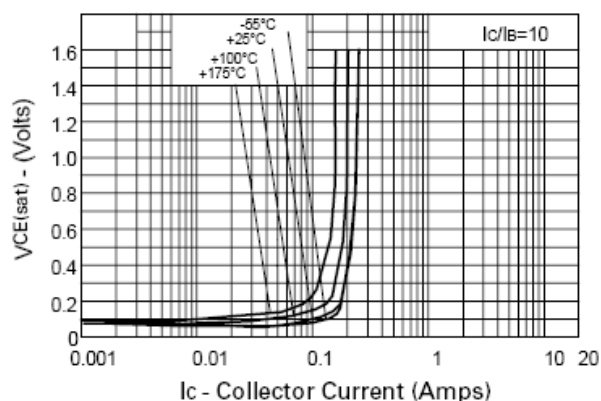
Marking

Marking	458
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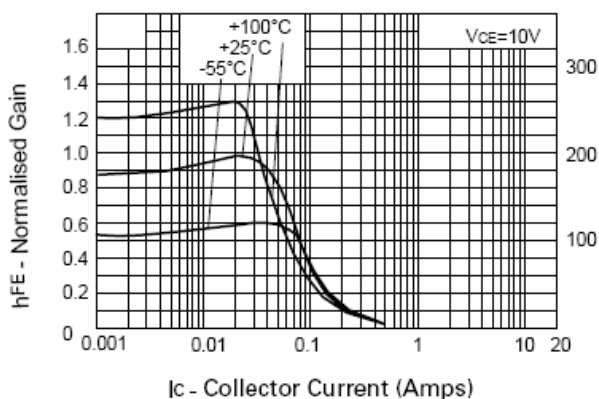
RATINGS AND CHARACTERISTIC CURVES



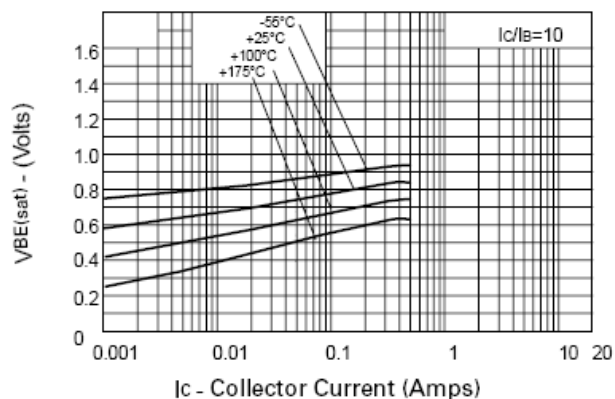
$V_{CE(sat)}$ v I_C



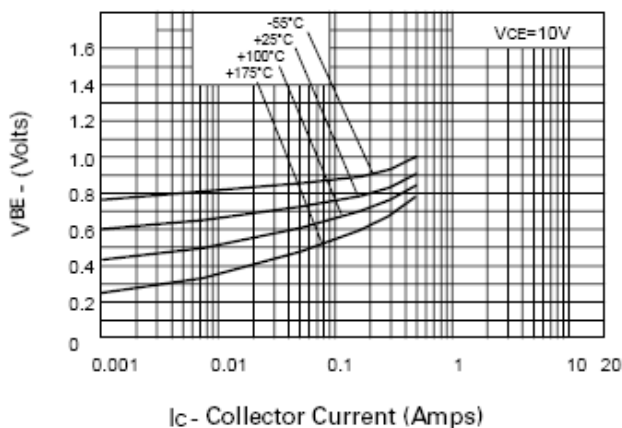
$V_{CE(sat)}$ v I_C



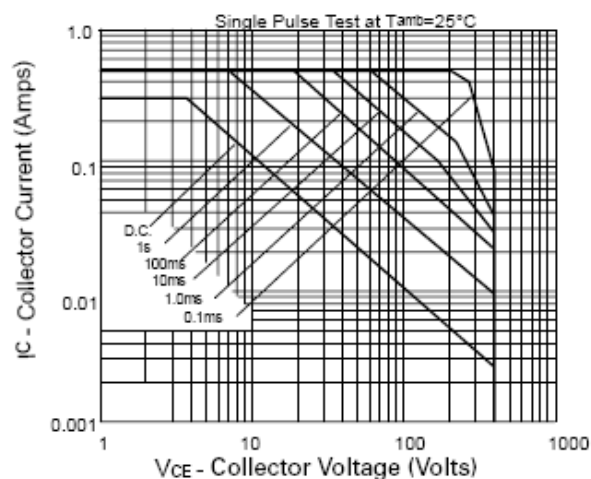
h_{FE} v I_C



$V_{BE(sat)}$ v I_C



$V_{BE(on)}$ v I_C



Safe Operating Area