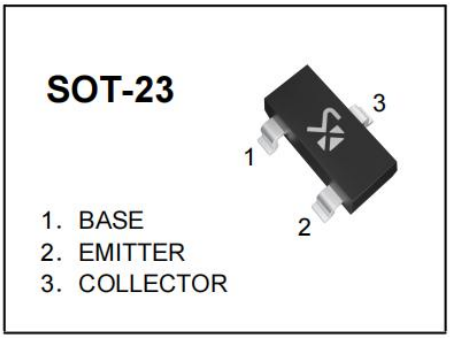
FMMT458

NPN Silicon Epitaxial Planar Transistor



Features

- Complementary Type FMMT558
- Part Marking Detail 458

Marking: 458

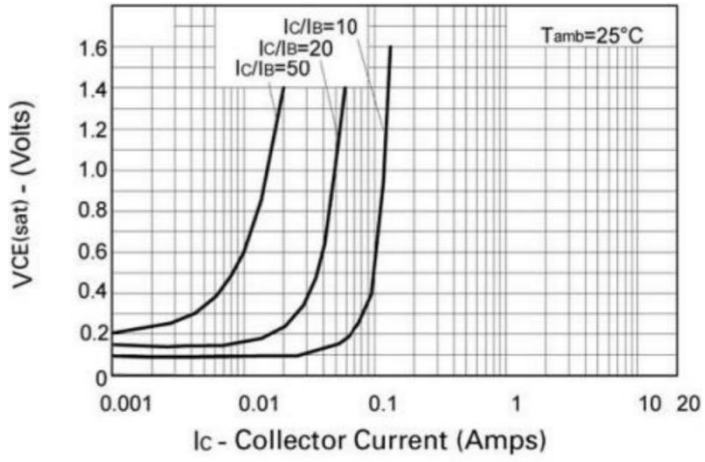
Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	225	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

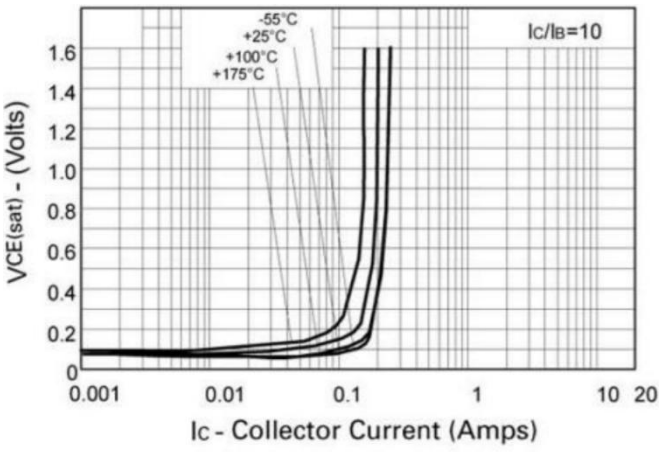
Electrical Characteristics (Ta=25°C, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=320V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=10V,I_C=1mA	100			
		V_{CE}=10V,I_C=50mA	100		300	
		V_{CE}=10V,I_C=100mA	15			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=1mA,I_B=0.1mA			0.4	V
		I_C=10mA,I_B=1mA			0.5	
		I_C=50mA,I_B=5mA			0.75	
Collector-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA,I_B=1mA			0.75	V
Collector output capacitance	C_{ob}	V_{CB}=20V,I_E=0,f=1MHz			5	pF
Transition frequency	f_T	V_{CE}=20V,I_C=10mA, f=20MHz	50			MHz

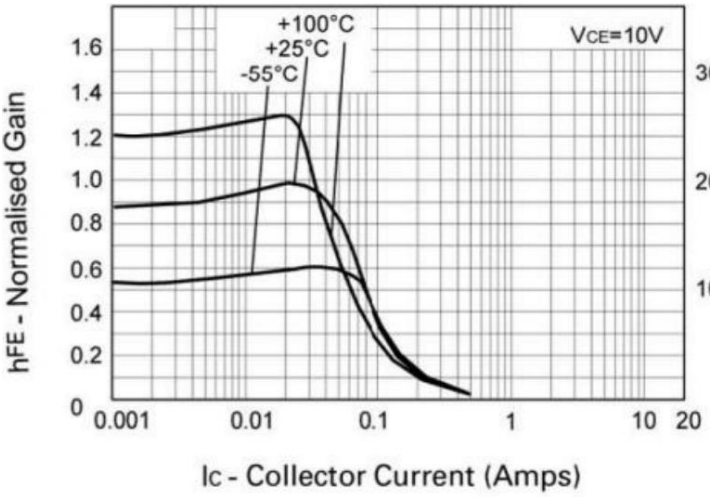
Typical Characteristics



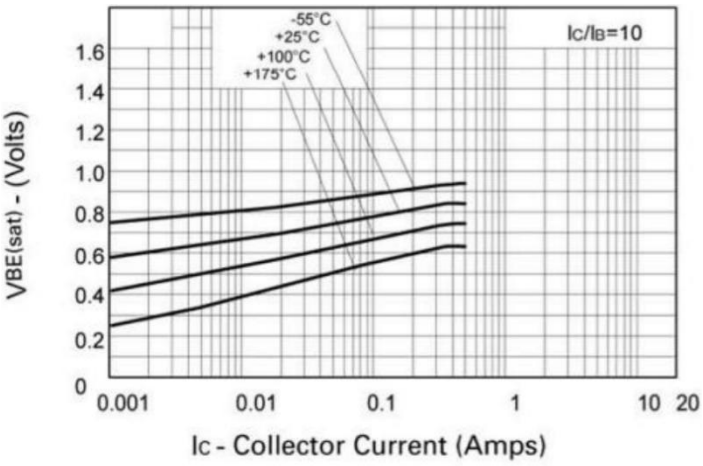
VCE(sat) v IC



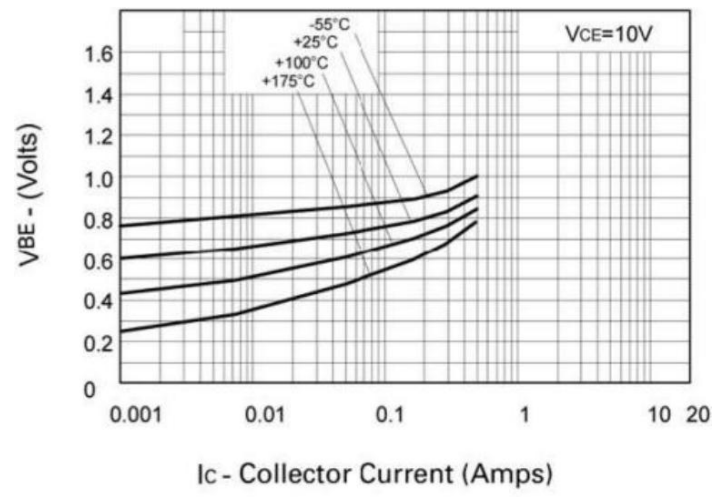
VCE(sat) v IC



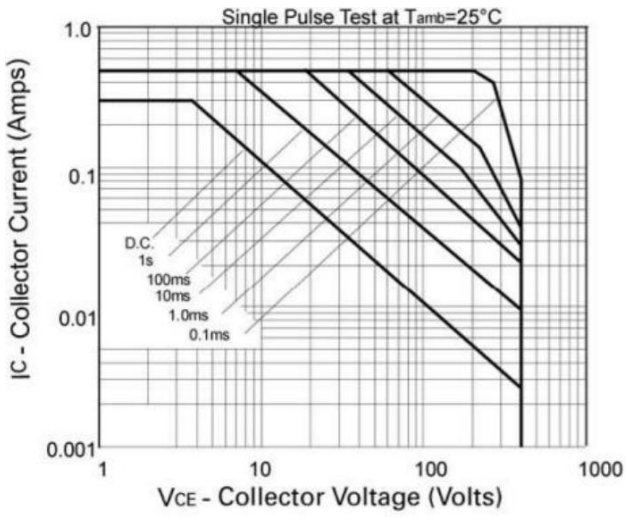
hFE v IC



VBE(sat) v IC



VBE(on) v IC

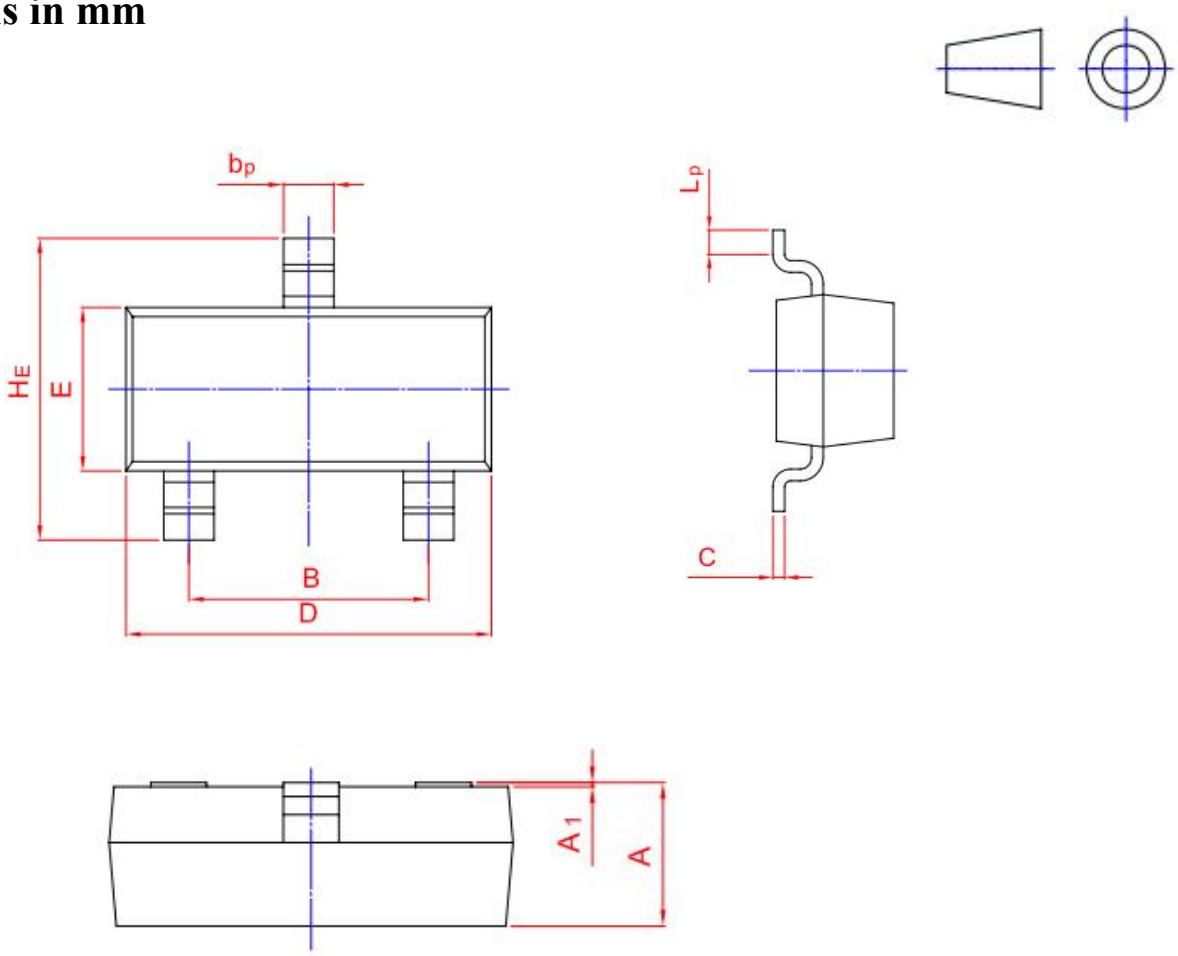


Safe Operating Area

Package Information

SOT-23

Dimensions in mm



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_P
Mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20

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