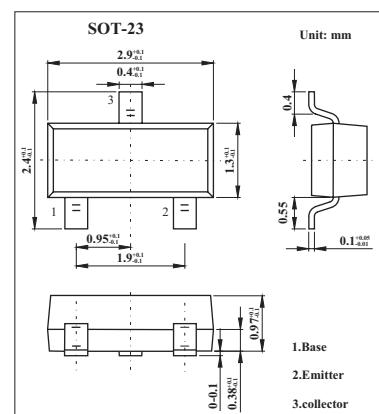


## High Voltage Transistor

### FMMT458

#### ■ Features

- 400 Volt V<sub>CCEO</sub>



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	400	V
Collector-emitter voltage	V <sub>CCEO</sub>	400	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Peak collector current	I <sub>CM</sub>	1	A
Collector current	I <sub>C</sub>	225	mA
Base current	I <sub>B</sub>	200	mA
Power dissipation	P <sub>tot</sub>	500	mW
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

**FMMT458**

■ Electrical Characteristics Ta = 25°C

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

■ Marking

Marking	458
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