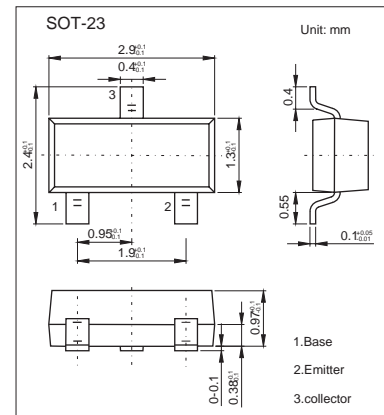


High Performance Transistor

FMMT455

■ Features

- 140 Volt V_{CE0}
- 1 Amp continuous current
- $P_{tot} = 500$ mW

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	160	V
Collector-emitter voltage	V_{CEO}	140	V
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CM}	2	A
Collector current	I_C	1	A
Base current	I_B	200	mA
Power dissipation	P_{tot}	500	mW
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}$	160			V
Collector-emitter sustaining voltage *	$V_{CEO(sus)}$	$I_C=10\text{mA}$	140			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$	5			V
Collector cutoff current	I_{CBO}	$V_{CB}=140\text{V}$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}$			0.1	μA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C=150\text{mA}, I_B=15\text{mA}$			0.7	V
Static Forward Current Transfer Ratio	h_{FE}	$I_C=150\text{mA}, V_{CE}=10\text{V}^*$	100		300	
		$I_C=1\text{A}, V_{CE}=10\text{V}^*$		10		
Transition frequency	f_T	$I_C=50\text{mA}, V_{CE}=10\text{V}, f=100\text{MHz}$	100			MHz
Output capacitance	C_{ob0}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			15	pF

* Pulse test: $t_p = 300$ μs ; $d \leq 0.02$.

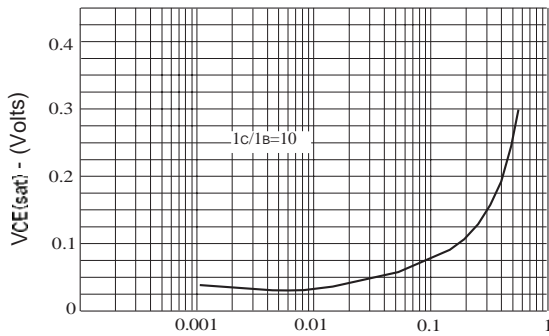
■ Marking

Marking	455
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High Voltage Transistor

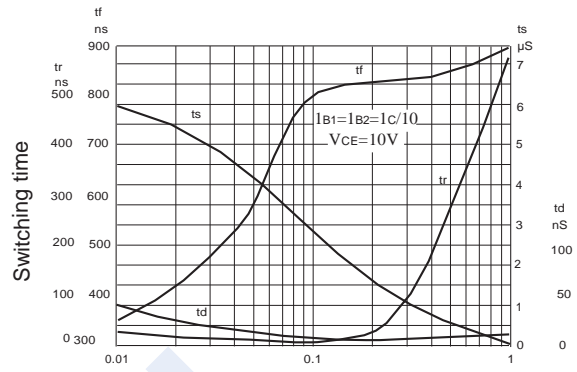
FMMT458 (KMMT458)

Typical Characteristics



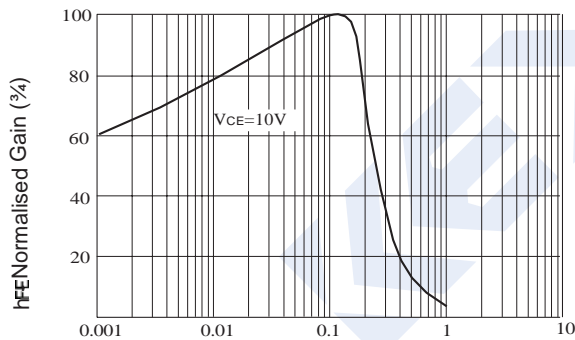
IC - Collector Current (Amps)

VCE(sat) V IC



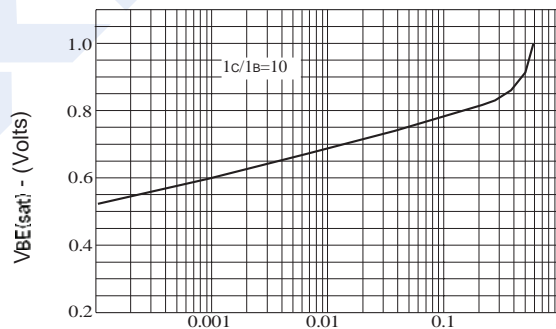
IC - Collector Current (Amps)

Typical Switching Speeds



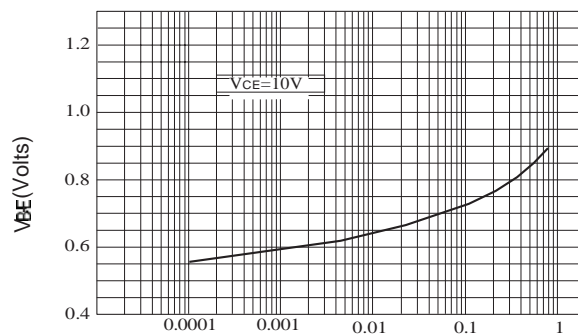
IC - Collector Current (Amps)

hFE V IC



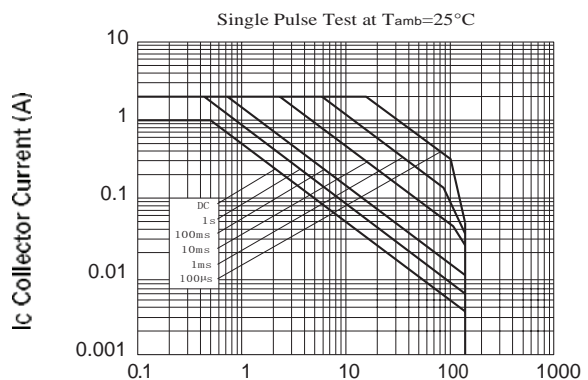
IC - Collector Current (Amps)

VBE(sat) V IC



IC - Collector Current (Amps)

VBE(on) V IC



VCE - Collector Emitter Voltage (V)

Safe Operating Area