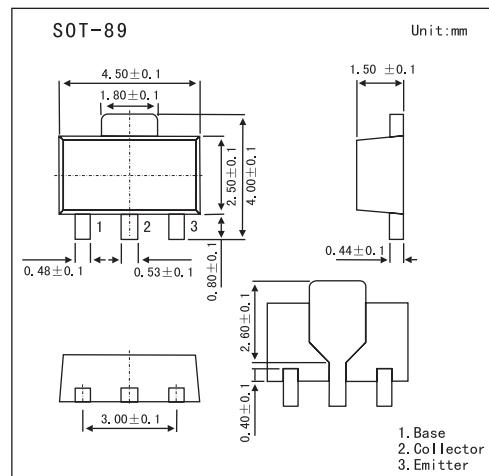


NPN Silicon Planar High Voltage Transistor

FCX458

■ Features

- 400 Volt V_{CCEO}
- P_{tot}= 1 Watt



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	400	V
Collector-Emitter Voltage	V _{CCEO}	400	V
Emitter-Base Voltage	V _{EBO}	5	V
Continuous Collector Current	I _c	300	mA
Peak Pulse Current	I _{CM}	1	A
Base Current	I _B	200	mA
Power Dissipation at T _{amb} =25°C	P _{tot}	2	W
Operating and Storage Temperature Range	T _j :T _{stg}	-55 to +150	°C

FCX458

■ Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Testconditons	Min	Max	Unit
Breakdown Voltages	V(BR)CBO	Ic=100µA	400		V
Breakdown Voltages	VCEO(sus)	Ic=10mA*	400		V
Breakdown Voltages	V(BR)EBO	Ie=100µA	5		V
Collector Cut-Off Currents	IcBO	Vcb=320V		100	nA
Collector Cut-Off Currents	Ices	Vce=320V		100	nA
Emitter Cut-Off Current	IeBO	Veb=4V		100	nA
Emitter Saturation Voltages	Vce(sat)	Ic=20mA, Ib=2mA*	0.2		V
		Ic=50mA, Ib=6mA*	0.5		V
	Vbe(sat)	Ic=50mA, Ib=5mA*	0.9		V
Base-Emitter Turn On Voltage	Vbe(on)	Ic=50mA, Vce=10V*	0.9		V
Static Forward Current Transfer Ratio	hFE	Ic=1mA, Vce=10V	100		
		Ic=50mA, Vce=10V*	100	300	
		Ic=100mA, Vce=10V*	15		
Transition Frequency	fT	Ic=10mA, Vce=20V, f=20MHz	50		MHz
Collector-Base Breakdown Voltage	Vcb0	Vcb=20V, f=1MHz		5	pF
Switching times	t _{on}	Ic=50mA, Vcc=100V	135	Typical	ns
	t _{off}	Ib1=5mA, Ib2=-10mA	2260	Typical	ns

* Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤ 2%

■ Marking

Marking	N58
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