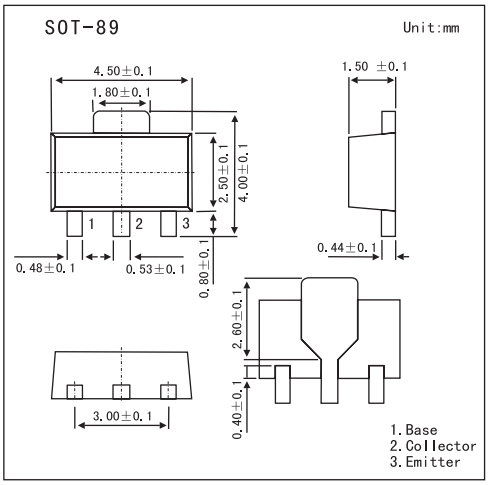
NPN Silicon Planar High Voltage Transistor

FCX458



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	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℃	P_{tot}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	℃

FCX458

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Max	Unit
Breakdown Voltages	$V_{(BR)CBO}$	I_C=100μA	400		V
Breakdown Voltages	$V_{CEO(sus)}$	I_C=10mA*	400		V
Breakdown Voltages	$V_{(BR)EBO}$	I_E=100μA	5		V
Collector Cut-Off Currents	I_{CBO}	V_{CB}=320V		100	nA
Collector Cut-Off Currents	I_{CES}	V_{CE}=320V		100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4V		100	nA
Emitter Saturation Voltages	$V_{CE(sat)}$	I_C=20mA, I_B=2mA*		0.2	V
		I_C=50mA, I_B=6mA*		0.5	V
	$V_{BE(sat)}$	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
Collector-Base Breakdown Voltage	C_{obo}	V_{CB}=20V, f=1MHz		5	pF
Switching times	t_{on}	I_C=50mA, V_{CC}=100V	135 Typical		ns
	t_{off}	I_{B1}=5mA, I_{B2}=-10mA	2260 Typical		ns

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

■ Marking

Marking	N58