

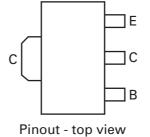
FCX495 SOT89 NPN silicon planar high voltage transistor

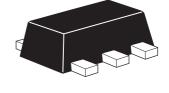
Features

- 150 Volt V_{CEO}
- 1 Amp continuous current

Device marking

N95





Absolute maximum ratings

Parameter	Symbol	Value	Unit
Collector-base voltage	V _{CBO}	170	V
Collector-emitter voltage	V _{CEO}	150	V
Emitter-base voltage	V _{EBO}	5	V
Continuous collector current	I _c	1	Α
Peak pulse current	I _{CM}	2	Α
Base current	I _B	200	mA
Power dissipation at T _{amb} = 25°C	P _{tot}	1	W
Operating and storage temperature range	T _j :T _{stg}	-65 to +150	°C

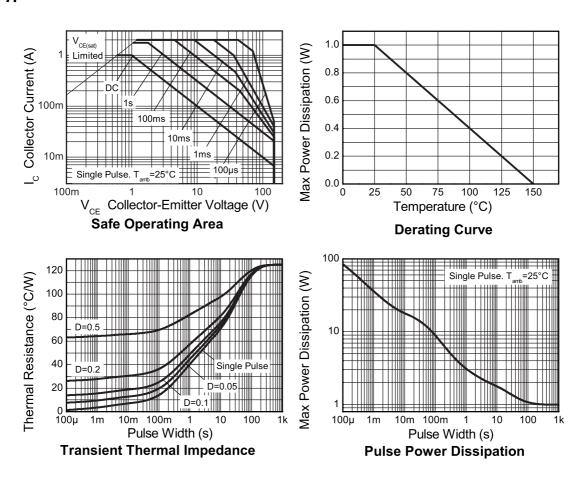
Electrical characteristics (at T_{amb} = 25°C)

Parameter	Symbol	Min.	Max.	Unit	Conditions
Breakdown voltages	V _{(BR)CBO}	170		V	I _C =100μA
	V _{CEO(sus)}	150		V	I _C =10mA ^(*)
	V _{(BR)EBO}	5		V	I _E =100μA
Collector cut-off currents	I _{CBO} , I _{CES}		100	nA	V _{CB} =150V, V _{CE} =150V
Emitter cut-off current	I _{EBO}		100	nA	V _{EB} =4V
Emitter saturation voltages	V _{CE(sat)}		0.2	V	I _C =250mA, I _B =25mA ^(*)
			0.3	V	I _C =500mA, I _B =50mA ^(*)
	V _{BE(sat)}		1.0	V	I _C =500mA, I _B =50mA ^(*)
Base-emitter turn on voltage	V _{BE(on)}		1.0	V	I _C =500mA, V _{CE} =10V ^(*)
Static forward current transfer	h _{FE}	100	300		I _C =1mA, V _{CE} =10V
ratio		100			I _C =250mA, V _{CE} =10V ^(*)
		50			I _C =500mA, V _{CE} =10V ^(*)
		10			I _C =1A, V _{CE} =10V ^(*)
Transition frequency	f _T	100		MHz	I _C =50mA, V _{CE} =10V
					f=100MHz
Collector-base breakdown voltage	C _{obo}		10	pF	V _{CB} =10V, f=1MHz

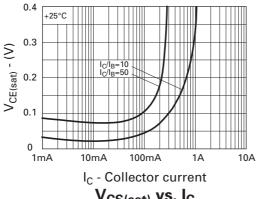
NOTES:

^(*) Measured under pulsed conditions. Pulse width = 300 μ s. Duty cycle ${\le}2\%$

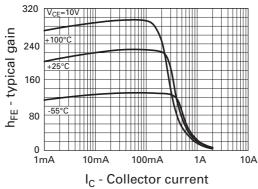
Typical characteristics



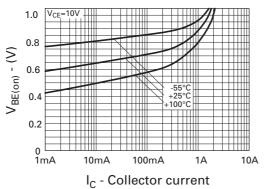
Typical characteristics



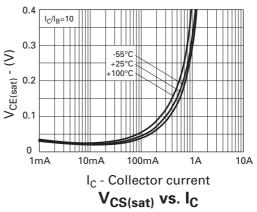


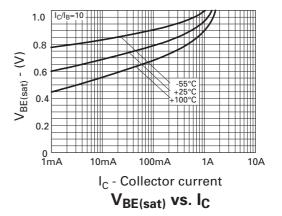


h_{FE} vs. I_C



V_{BE(on)} vs. I_C

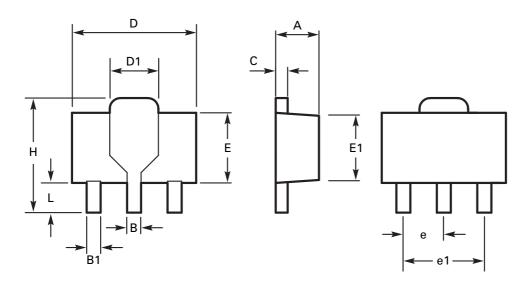




FCX495

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Package outline - SOT89



DIM	Millin	neters	Inc	hes	DIM	Millimeters		Inches	
	Min	Max	Min	Max		Min	Max	Min	Max
Α	1.40	1.60	0.550	0.630	Е	2.29	2.60	0.090	0.102
В	0.44	0.56	0.017	0.022	E1	2.13	2.29	0.084	0.090
B1	0.36	0.48	0.014	0.019	е	1.50	BSC	0.059	BSC
С	0.35	0.44	0.014	0.017	e1	3.00 BSC		0.118 BSC	
D	4.40	4.60	0.173	0.181	Н	3.94	4.25	0.155	0.167
D1	1.52	1.83	0.064	0.072	L	0.89	1.20	0.035	0.047

Note: Controlling dimensions are in millimeters. Approximate dimensions are provided in inches

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