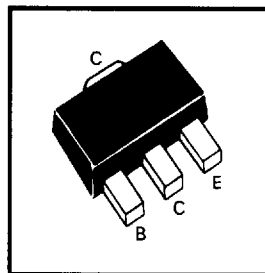


SOT89 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FCX5550

FEATURES

- * HIGH $V_{CE0}=140V$.
- * LOW $V_{CE(SAT)}=0.25V$.
- * COMPLEMENTARY TYPE - FCX5401
- PARTMARKING DETAILS - N9



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	140	V
Emitter-Base Voltage	V_{EBO}	6	V
Continuous Collector Current	I_C	600	mA
Power Dissipation @ $T_{amb}=25^{\circ}C$	P_{TOT}	1	W
Operating And Storage Temperature Range	$tj:tstg$	-65 TO +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb}=25^{\circ}C$ unless otherwise stated)

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	160		V	$I_C=100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	140		V	$I_C=1mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6		V	$I_E=10\mu A$
Collector Cut-Off Current	I_{CBO}		100 100	nA μA	$V_{CB}=100V$ $V_{CB}=100V, T_a=100^{\circ}C$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$		0.15 0.25	V V	$I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$		1.0 1.2	V V	$I_C=10mA, I_B=1mA$ $I_C=50mA, I_B=5mA$
Static Forward Current Transfer Ratio	h_{FE}	60 60 20	250		$I_C=1mA, V_{CE}=5V$ $I_C=10mA, V_{CE}=5V$ $I_C=50mA, V_{CE}=5V$
Transition Frequency	f_T	100	300	MHz	$I_C=10mA, V_{CE}=10V$, $f=100MHz$
Small Signal Current Gain	h_{FE}	50	200		$I_C=1mA, V_{CE}=10V$ $f=1KHz$
Output Capacitance	C_{obo}		6	pF	$V_{CB}=10V, f=1MHz$
Noise Figure	N_F		10	dB	$I_C=250\mu A, V_{CE}=5V$, $RS=1K\Omega, f=10Hz$ to 15.7KHz

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle= $\leq 2\%$

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