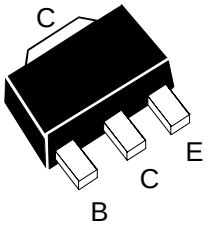
SOT89 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 - OCTOBER 1995 ✪

BFN16



COMPLEMENTARY TYPE - BFN17
PARTMARKING DETAILS - DD

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	250	V
Collector-Emitter Voltage	V_{CEO}	250	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	500	mA
Continuous Collector Current	I_C	200	mA
Base Current	I_B	100	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.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	250		V	I_C=100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	250		V	I_C=1mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		V	I_E=100μA
Collector Cut-Off Current	I_{CBO}		100 20	nA μA	V_{CB}=250V V_{CB}=250V, T_{amb}=150 °C
Emitter Cut-Off Current	I_{EBO}		100	nA	V_{EB}=3V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.4	V	I_C=20mA, I_B=2mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		0.9	V	I_C=20mA, I_B=2mA
Static Forward Current Transfer Ratio	h_{FE}	25 40 40			I_C=1mA,V_{CE}=10V* I_C=10mA, V_{CE}=10V I_C=30mA, V_{CE}=10V
Transition Frequency	f_T	Typ.70		MHz	I_C=20mA, V_{CE}=10V* f=20MHz
Output Capacitance	C_{obo}	Typ.1.5		pF	V_{CB}=30V,f=1MHz

* Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%
For typical characteristics graphs see FMMTA42 datasheet