

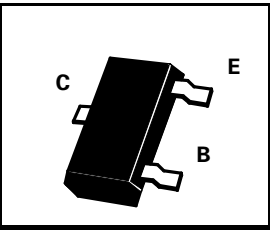
SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTORS

ISSUE 4 - NOVEMBER 1996

FMMT5400
FMMT5401

PARTMARKING DETAILS - FMMT5400 - 1LZ
FMMT5401 - Z2L

COMPLEMENTARY TYPES - FMMT5400 - FMMT5550
FMMT5401 - FMMT5551



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMT5400	FMMT5401	UNIT
Collector-Base Voltage	V_{CBO}	-130	-160	V
Collector-Emitter Voltage	V_{CEO}	-120	-150	V
Emitter-Base Voltage	V_{EBO}	-5	-5	V
Continuous Collector Current	I_C	-600	-600	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	330	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150		$^{\circ}C$

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

PARAMETER	SYMBOL	FMMT5400		FMMT5401		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-130		-160		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-120		-150		V	$I_C = -1mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E = -10\mu A$
Collector Cut-Off Current	I_{CBO}		-100 -100		-50 -50	nA μA nA μA	$V_{CB} = -100V$ $V_{CB} = -100V, T_A = 100^{\circ}C$ $V_{CB} = -120V$ $V_{CB} = -120V, T_A = 100^{\circ}C$
Static Forward Current Transfer Ratio	h_{FE}	30 40 40	-180	50 60 50	240		$I_C = -1mA, V_{CE} = -5V$ $I_C = -10mA, V_{CE} = -5V$ $I_C = -50mA, V_{CE} = -5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.2 -0.5		-0.2 -0.5	V V	$I_C = -10mA, I_B = -1mA$ $I_C = -50mA, I_B = -5mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.0 -1.0		-1.0 -1.0	V V	$I_C = -10mA, I_B = -1mA$ $I_C = -50mA, I_B = -5mA$
Transition Frequency	f_T	100	400	100	300	MHz	$I_C = -10mA, V_{CE} = -10V$ $f = 100MHz$
Output Capacitance	C_{obo}		6.0		6.0	pF	$V_{CB} = -10V, f = 1MHz$
Small Signal	h_{fe}	30	200	40	260		$I_C = -1mA, V_{CE} = -10V$ $f = 1KHz$ †
Noise Figure	NF		8		8	dB	$I_C = -250\mu A, V_{CE} = -5V,$ $R_S = 1K\Omega$ $f = 10Hz$ to $15.7KHz$

† Periodic Sample Test Only