

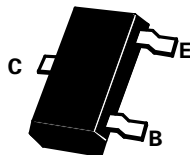
# SOT23 NPN SILICON PLANAR SMALL SIGNAL TRANSISTOR

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## FMMTA20

PARTMARKING DETAIL – FMMTA20 – 1C  
FMMTA20R – 3C

COMPLEMENTARY TYPE – FMMTA70



SOT23

### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Continuous Collector Current	$I_C$	100	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{tot}$	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	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	40		V	$I_C=1mA, I_E=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4		V	$I_E=100mA, I_C=0$
Collector Cut-Off Current	$I_{CBO}$		0.1	$\mu A$	$V_{CB}=30V, I_E=0$
Static Forward Current Transfer Ratio	$h_{FE}$	40	400		$I_C=5mA, V_{CE}=10V^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.25	V	$I_C=10mA, I_B=1mA$
Transition Frequency	$f_T$	125		MHz	$I_C=5mA, V_{CE}=10V$ $f=100MHz$
Output Capacitance	$C_{obo}$		4	pF	$V_{CB}=10V, f=140kHz, I_E=0$

\*Measured under pulsed conditions. Pulse width=300 $\mu s$ . Duty cycle  $\leq 2\%$   
Spice parameter data is available upon request for this device