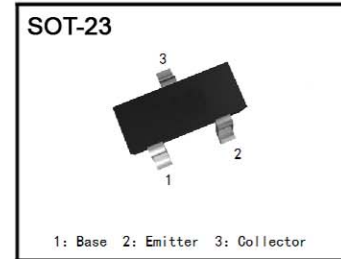


## ● FEATURES

- \* Low Equivalent on resistance  $R_{CE(sat)}=355m\Omega$  at 1A\*

COMPLEMENTARY TYPE- FMMT491  
PARTMARKING DETAIL - 591



## ● ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-80	V
Collector-Emitter Voltage	$V_{CEO}$	-60	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Peak Pulse Current	$I_{CM}$	-2	A
Continuous Collector Current	$I_C$	-1	A
Base Current	$I_B$	-200	mA
Power Dissipation at $T_{amb}=25^\circ C$	$P_{tot}$	500	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	$V_{(BR)CBO}$	-80		V	$I_C=-100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		V	$I_C=-10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E=-100\mu A, I_C=0$
Collector Cut-Off Current	$I_{CBO}$		-100	nA	$V_{CB}=-60V$
Emitter Cut-Off Current	$I_{EBO}$		-100	nA	$V_{EB}=-4V, I_C=0$
Collector-Emitter Cut-Off Current	$I_{CES}$		-100	nA	$V_{CES}=-60V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.3 -0.6	V	$I_C=-500mA, I_B=-50mA^*$ $I_C=-1A, I_B=-100mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.2	V	$I_C=-1A, I_B=-100mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C=-1A, V_{CE}=-5V^*$
Static Forward Current Transfer Ratio	$h_{FE}$	100 100 80 15	300		$I_C=-1mA, V_{CE}=-5V^*$ $I_C=-500mA, V_{CE}=-5V^*$ $I_C=-1A, V_{CE}=-5V^*$ $I_C=-2A, V_{CE}=-5V^*$
Transition Frequency	$f_T$	150		MHz	$I_C=-50mA, V_{CE}=-10V$ $f=100MHz$
Output Capacitance	$C_{obo}$		10	pF	$V_{CB}=-10V, f=1MHz$

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

## TYPICAL CHARACTERISTICS

