SOT223 NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

FZT491A

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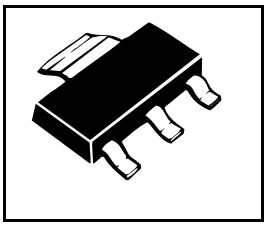

PARTMARKING DETAIL – FZT491A

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	40	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°C	P_{tot}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Breakdown Voltage	$V_{(BR)CBO}$	40			V	I_C=100µA
	$V_{(BR)CEO}$	40			V	I_C=10mA*
	$V_{(BR)EBO}$	5			V	I_E=100µA
Collector Cut-Off Current	I_{CBO}			100	nA	V_{CB}=30V
Emitter Cut-Off Current	I_{EBO}			100	nA	V_{EB}=4V
Collector-Emitter Cut-Off Current	I_{CES}			100	nA	V_{CES}=30V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.3 0.5	V V	I_C=500mA, I_B =50mA* I_C=1A, I_B =100mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.1	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	h_{FE}	300 300 200 35		900		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=300µs.

For typical characteristics graphs see FMMT491A datasheet