SOT223 NPN SILICON PLANAR DARLINGTON TRANSISTOR

FZTA14

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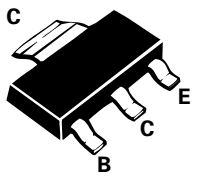
PARTMARKING DETAIL:- DEVICE TYPE IN FULL

COMPLEMENTARY TYPE :- FZTA64



SOT223

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CES}	30	V
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Continuous Collector Current	I_C	1	A
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.
Collector-Base Breakdown Voltage	$V_{(BR)CES}$	30			V	I_C=100μA, V_{BE}=0
Collector Cut-Off Current	I_{CBO}			100	nA	V_{CB}=30V, I_E=0
Emitter Cut-Off Current	I_{EBO}			100	nA	V_{EB}=10V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			1.5 1.6	V V	I_C=100mA, I_B=0.1mA* I_C=1A, I_B=1mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			2.0	V	I_C=100mA, V_{CE}=5V*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			2.0 2.2	V V	I_C=100mA, I_B=0.1mA I_C=1A, I_B=1mA
Static Forward Current Transfer Ratio	h_{FE}	10K 20K 5K				I_C=10mA, V_{CE}=5V* I_C=100mA, V_{CE}=5V* I_C=1A, V_{CE}=5V*
Transition Frequency	f_T		170		MHz	I_C=50mA, V_{CE}=5V* f=20MHz

*Measured under pulsed conditions. Pulse Width=300μs. Duty cycle ≤2%
Spice parameter data is available upon request for this device
For typical characteristics graphs see FMMT38C datasheet.