



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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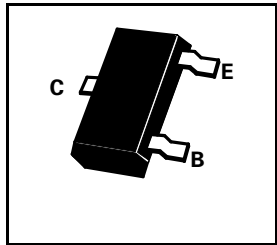


SOT23 NPN SILICON PLANAR DARLINGTON TRANSISTORS



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COMPLEMENTARY TYPES - FMMTA12 - NONE
FMMTA13 - FMMTA63
FMMTA14 - FMMTA64



PARTMARKING DETAILS - FMMTA12 - 3W
FMMTA13 - 1M
FMMTA14 - 1N

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMTA12	FMMTA13/14	UNIT
Collector-Base Voltage	V_{CBO}		40	V
Collector-Emitter Voltage	V_{CEO}		40	V
Collector-Emitter Voltage	V_{CES}	20	40	V
Emitter-Base Voltage	V_{EBO}		10	V
Continuous Collector Current	I_C		300	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-Emitter Breakdown Voltage	$V_{(BR)CES}$	20 40		V V	$I_C=100\mu A, I_B=0^*$ $I_C=100\mu A, I_B=0^*$
Collector Cut-Off Current	I_{CES}		100	nA	$V_{CB}=15V, V_{BE}=0$
Collector Cut-Off Current	I_{CBO}		100 100	nA nA	$V_{CB}=15V, I_E=0$ $V_{CB}=30V, I_E=0$
Emitter Cut-Off Current	I_{EBO}		100	nA	$V_{EB}=10V, I_C=0$
Static Forward Current Transfer Ratio	h_{FE}	20K 5K 10K 10K 20K			$I_C=10mA, V_{CE}=5V^*$ $I_C=10mA, V_{CE}=5V^*$ $I_C=100mA, V_{CE}=5V^*$ $I_C=10mA, V_{CE}=5V^*$ $I_C=100mA, V_{CE}=5V^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		1.0 0.9	V V	$I_C=10mA, I_B=0.01mA$ $I_C=100mA, I_B=0.1mA$
Base-Emitter On Voltage	$V_{BE(on)}$		1.4 2.0	V V	$I_C=10mA, V_{CE}=5V^*$ $I_C=100mA, V_{CE}=5V^*$

*Measured under pulsed conditions. Pulse width = 300 μs . Duty cycle $\leq 2\%$
Spice parameter data is available upon request for these devices
For typical graphs see FMMT38A datasheet