

# SOT23 PNP SILICON PLANAR DARLINGTON TRANSISTORS

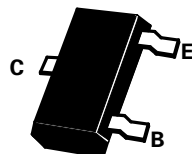
## FMMTA63 FMMTA64

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PARTMARKING DETAIL – FMMTA63 - Z2U  
FMMTA64 - Z2V

COMPLEMENTARY TYPES – FMMTA63 - FMMTA13  
FMMTA64 - FMMTA14



SOT23

### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-30	V
Collector-Emitter Voltage	$V_{CEO}$	-30	V
Emitter-Base Voltage	$V_{EBO}$	-10	V
Peak Pulse Current	$I_{CM}$	-800	mA
Continuous Collector Current	$I_C$	-500	mA
Peak Base Current	$I_{BM}$	-200	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	FMMTA63		FMMTA64		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-30		-30		V	$I_C = -10\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30		-30		V	$I_C = -10mA, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-10		-10		V	$I_E = -10\mu A, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$		-0.1		-0.1	$\mu A$	$V_{CB} = -30V, I_E = 0$
Emitter Cut-Off Current	$I_{EBO}$		-0.1		-0.1	$\mu A$	$V_{CE} = -10V$
Static Forward Current Transfer Ratio	$h_{FE}$	5K 10K		10K 20K			$I_C = -10mA, V_{CE} = 5V^*$ $I_C = -100mA, V_{CE} = 5V^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-1.5		-1.5	V	$I_C = -100mA, I_B = -0.1mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-2.0		-2.0	V	$I_C = -100mA, I_B = -0.1mA^*$
Transition Frequency	$f_T$	125		125		MHz	$I_C = -50mA, V_{CE} = -5V$ $f = 20MHz$

\*Measured under pulsed conditions. Pulse width=300 $\mu s$ . Duty cycle  $\leq 2\%$   
For typical characteristics graphs see FZTA63 datasheet.