



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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SOT223 PNP SILICON PLANAR SWITCHING TRANSISTOR

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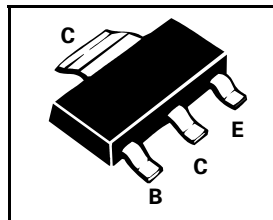


FZT2907 FZT2907A

FEATURES

- * 60 Volt V_{CEO}
- * Fast switching

PARTMARKING DETAIL – FZT2907 – FZT2907
FZT2907A – FZT2907A



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FMMT2907	FMMT2907A	UNIT
Collector-Base Voltage	V_{CBO}	-60		V
Collector-Emitter Voltage	V_{CEO}	-40	-60	V
Emitter-Base Voltage	V_{EBO}	-5		V
Continuous Collector Current	I_C	-600		mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	1.5		mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150		$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	FZT2907		FZT2907A		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-40		-60		V	$I_C = -10\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		-60		V	$I_C = -10mA, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E = -10\mu A, I_C = 0$
Collector-Emitter Cut-Off Current	I_{CEX}		-50		-50	nA	$V_{CE} = -30V, V_{BE} = -0.5V$
Collector Cut-Off Current	I_{CBO}		-20 -20		-10 -10	nA μA	$V_{CB} = -50V, I_E = 0$ $V_{CB} = -50V, I_E = 0, T_{amb} = 150^{\circ}C$
Base Cut-Off Current	I_B		-50		-50	nA	$V_{CE} = -30V, V_{BE} = -0.5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.4 -1.6		-0.4 -1.6	V V	$I_C = -150mA, I_B = -15mA^*$ $I_C = -500mA, I_B = -50mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.3 -2.6		-1.3 -2.6	V V	$I_C = -150mA, I_B = -15mA^*$ $I_C = -500mA, I_B = -50mA^*$
Static Forward Current Transfer Ratio	h_{FE}	35 50 75 100 30	300	75 100 100 100 50	300		$I_C = -0.1mA, V_{CE} = -10V$ $I_C = -1mA, V_{CE} = -10V$ $I_C = -10mA, V_{CE} = -10V$ $I_C = -150mA, V_{CE} = -10V^*$ $I_C = -500mA, V_{CE} = -10V^*$
Transition Frequency	f_T	200		200		MHz	$I_C = -50mA, V_{CE} = -20V$ $f = 100MHz$

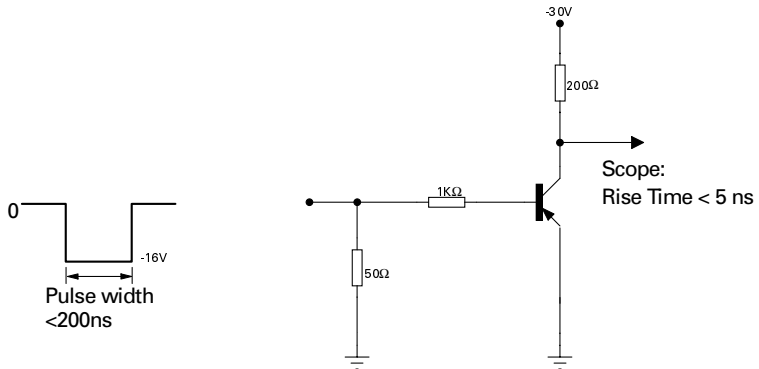
*Measured under pulsed conditions. Pulse width=300ms. Duty cycle $\leq 2\%$

FZT2907 FZT2907A

SWITCHING CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	FMMT2907		FMMT2907A		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Output Capacitance	C_{obo}		8		8	pF	$V_{CE} = -10\text{V}$, $I_E = 0$, $f = 100\text{KHz}$
Input Capacitance	C_{ibo}		30		30	pF	$V_{BE} = -2\text{V}$, $I_C = 0$ $f = 100\text{KHz}$
Turn On Time	t_{on}		50		50	ns	$V_{CE} = -30\text{V}$ $I_C = -150\text{mA}$, $I_{B1} = -15\text{mA}$ (See Turn On Circuit)
Turn Off Time	t_{off}		110		110	ns	$V_{CE} = -6\text{V}$, $I_C = -150\text{mA}$ $I_{B1} = I_{B2} = -15\text{mA}$ (See Turn Off Circuit)

TURN ON TIME – TEST CIRCUIT



TURN OFF TIME – TEST CIRCUIT

