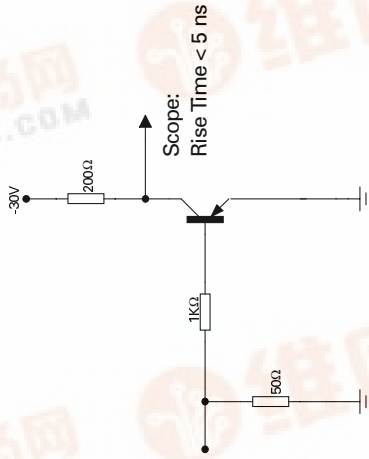
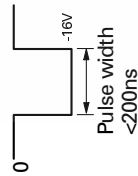


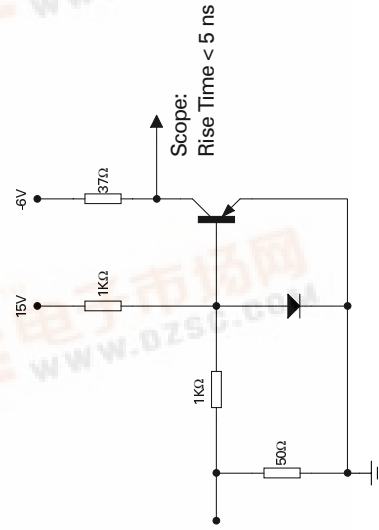
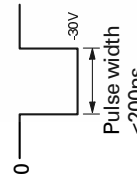
SWITCHING CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	FM2907		FM2907A		UNIT	CONDITIONS
		TYP.	MAX.	TYP.	MAX.		
Output Capacitance	C _{obo}		8	8	8	pF	V _{CE} =-10V, I _E =0, f=100KHz
Input Capacitance	C _{ibo}		30	30	30	pF	V _{BE} =-2V, I _C =0, f=100KHz
Turn On Time	t _{on}	26	50	26	50	ns	V _{CE} =-30V, I _C =150mA, I _B =-15mA (See Turn On Circuit)
Turn Off Time	t _{off}	70	110	70	110	ns	V _{CE} =-6V, I _C =150mA, I _B =-15mA (See Turn Off Circuit)

TURN ON TIME – TEST CIRCUIT

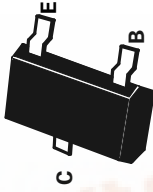


TURN OFF TIME – TEST CIRCUIT



FEATURES

- * Fast switching
- COMPLIMENTARY TYPES - FM2907 – FM2222
- FM2907A – FM2222A
- PARTMARKING DETAIL - FM2907 – 2BZ
FM2907A – 2F
FM2907R – 4P
FM2907AR – 5P



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FM2907	FM2907A	UNIT
Collector-Base Voltage	V _{CBO}		-60	V
Collector-Emitter Voltage	V _{CEO}		-40	V
Emitter-Base Voltage	V _{EBO}		-5	V
Continuous Collector Current	I _C		-600	mA
Power Dissipation at T _{amb} =25°C	P _{tot}		330	mW
Operating and Storage Temperature Range	T _J ; T _{stg}		-55 to +150	°C

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

PARAMETER	SYMBOL	FM2907		FM2907A		UNIT	CONDITIONS
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-40		-60		V	I _C =-10μA, 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 =-10μA, 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		-10	nA	V _{CE} =-50V, I _E =0
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		-0.4	V	I _C =-150mA, I _B =-15mA*
Base-Emitter Saturation Voltage	V _{BE(sat)}		-1.3		-1.3	V	I _C =-150mA, I _B =-15mA*
Static Forward Current Transfer Ratio	h _{FE}	35		75			I _C =-0.1mA, V _{CE} =-10V
		50		100			I _C =-1mA, V _{CE} =-10V
		75		100			I _C =-10mA, V _{CE} =-10V
		100		300			I _C =-150mA, V _{CE} =-10V*
		30		50			I _C =-500mA, V _{CE} =-10V*
Transition Frequency	f _T	200		200		MHz	I _C =-50mA, V _{CE} =-20V, f=100MHz

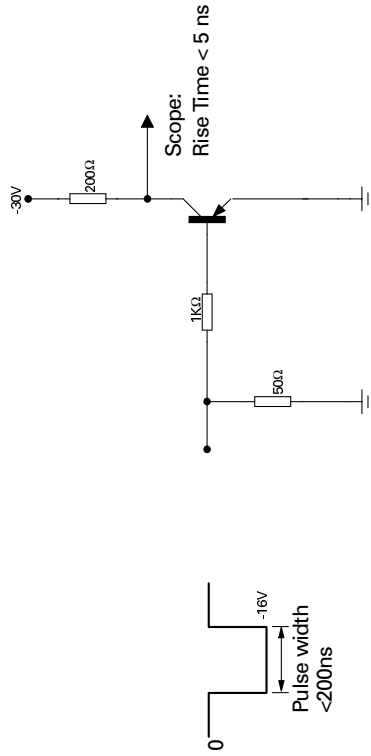
*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%

FM2MT2907 FM2MT2907A

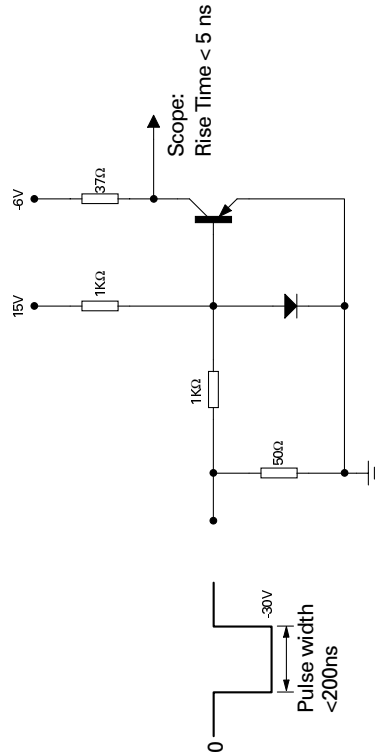
SWITCHING CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	FM2MT2907		FM2MT2907A		UNIT	CONDITIONS
		TYP.	MAX.	TYP.	MAX.		
Output Capacitance	C_{obo}		8	8	8	pF	$V_{CE}=10\text{V}, I_E=0,$ $f=100\text{KHz}$
Input Capacitance	C_{ibo}		30	30	30	pF	$V_{BE}=-2\text{V}, I_C=0$ $f=100\text{KHz}$
Turn On Time	t_{on}	26	50	26	50	ns	$V_{CE}=-30\text{V}$ $I_C=150\text{mA}, I_B=-15\text{mA}$ (See Turn On Circuit)
Turn Off Time	t_{off}	70	110	70	110	ns	$V_{CE}=-6\text{V}, I_C=150\text{mA}$ $I_B=I_{B1}=-15\text{mA}$ (See Turn Off Circuit)

TURN ON TIME – TEST CIRCUIT



TURN OFF TIME – TEST CIRCUIT

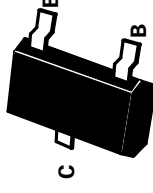


SOT23 PNP SILICON PLANAR SWITCHING TRANSISTOR

ISSUE 3 – FEBRUARY 1996

FEATURES

- * Fast switching
- COMPLIMENTARY TYPES - FM2MT2907 – FM2MT2222
- FM2MT2907A – FM2MT2222A
- PARTMARKING DETAIL - FM2MT2907 – 2BZ
FM2MT2907A – 2F
FM2MT2907R – 4P
FM2MT2907AR – 5P



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	FM2MT2907	FM2MT2907A	UNIT
Collector-Base Voltage	V_{CBO}		-60	V
Collector-Emitter Voltage	V_{CEO}		-40	V
Emitter-Base Voltage	V_{EBO}		-5	V
Continuous Collector Current	I_C		-600	mA
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$	P_{tot}		330	mW
Operating and Storage Temperature Range	T_j, T_{stg}		-55 to +150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	FM2MT2907		FM2MT2907A		UNIT	CONDITIONS
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-40		-60		V	$I_C=-10\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		-60		V	$I_C=-10\text{mA}, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		-5		V	$I_E=-10\mu\text{A}, I_C=0$
Collector-Emitter Cut-Off Current	I_{CEX}		-50		-50	nA	$V_{CE}=-30\text{V}, V_{BE}=-0.5\text{V}$
Collector Cut-Off Current	I_{CBO}		-20		-10	nA	$V_{CE}=-50\text{V}, I_E=0$
Base Cut-Off Current	I_B		-20		-10	μA	$V_{CE}=-50\text{V}, I_E=0, T_{amb}=150^{\circ}\text{C}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-50		-50	nA	$V_{CE}=-30\text{V}, V_{BE}=-0.5\text{V}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.4		-0.4	V	$I_C=-150\text{mA}, I_B=-15\text{mA}^*$
Static Forward Current Transfer Ratio	h_{FE}	35	300	75	300		$I_C=-500\text{mA}, I_B=-50\text{mA}^*$
Transition Frequency	f_T	75	300	100	300	MHz	$I_C=-0.1\text{mA}, V_{CE}=-10\text{V}$
		50	300	100	300		$I_C=-1\text{mA}, V_{CE}=-10\text{V}$
		30	300	100	300		$I_C=-10\text{mA}, V_{CE}=-10\text{V}$
		20	300	50	300		$I_C=-150\text{mA}, V_{CE}=-10\text{V}^*$

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