



SOT-323 Plastic-Encapsulate Transistors

MMST3906

TRANSISTOR (PNP)

FEATURES

Power dissipation

 P_{CM} : 0.2 W ($T_{amb}=25^{\circ}C$)

Collector current

 I_{CM} : -0.2 A

Collector-base voltage

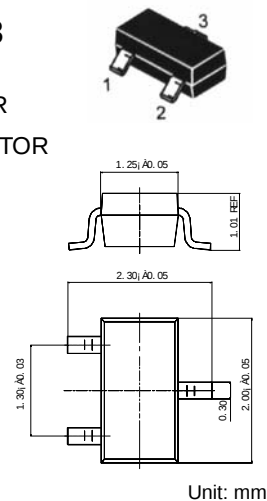
 $V_{(BR) CBO}$: -40 V

Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-323

1. BASE
2. EMITTER
3. COLLECTOR



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -40V, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -10mA$	100	300	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -50mA$	60		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5mA$		-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50mA, I_B = -5mA$		-0.95	V
Transition frequency	f_T	$V_{CE} = -20V, I_C = -10mA$ $f = 100MHz$	300		MHz
Output Capacitance	C_{ob}	$V_{CB} = -5V, I_E = 0$ $f = 1MHz$		4.5	pF
Delay time	t_d	$V_{CC} = -3V, I_C = -10mA$		35	nS
Rise time	t_r	$V_{BE(off)} = -0.5V, I_{B1} = -1mA$		35	nS
Storage time	t_s	$V_{CC} = -3V, I_C = -10mA$		225	nS
Fall time	t_f	$I_{B1} = I_{B2} = -1mA$		75	nS

Marking

K5N