

NPN Silicon Epitaxial Planar Transistor

MMST4401

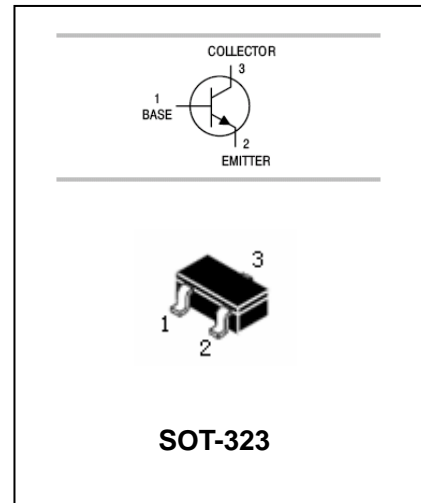
FEATURES

- Power dissipation. ($P_C=0.2W$)



APPLICATIONS

- Audio frequency general purpose amplifier.



ORDERING INFORMATION

Type No.	Marking	Package Code
MMST4401	K3X	SOT-323

MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	600	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^{\circ}C$

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}=35V, I_E=0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=35V, I_B=0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$		0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=150mA$ $V_{CE}=1V, I_C=500mA$	100 40	300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=150mA, I_B=15mA$		0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=150mA, I_B=15mA$		0.95	V
Transition frequency	f_T	$V_{CE}=10V, I_E=20mA$ $f=100MHz$	250		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		6.5	pF
Delay time	t_d	$V_{CC}=30V, V_{BE}=2V,$ $I_C=150mA, I_B=15mA$		15	nS
Rise time	t_r			20	nS
Storage time	t_s	$V_{CC}=30V, I_C=150mA,$ $I_{B1}=I_{B2}=15mA$		225	nS
Fall time	t_f			30	nS

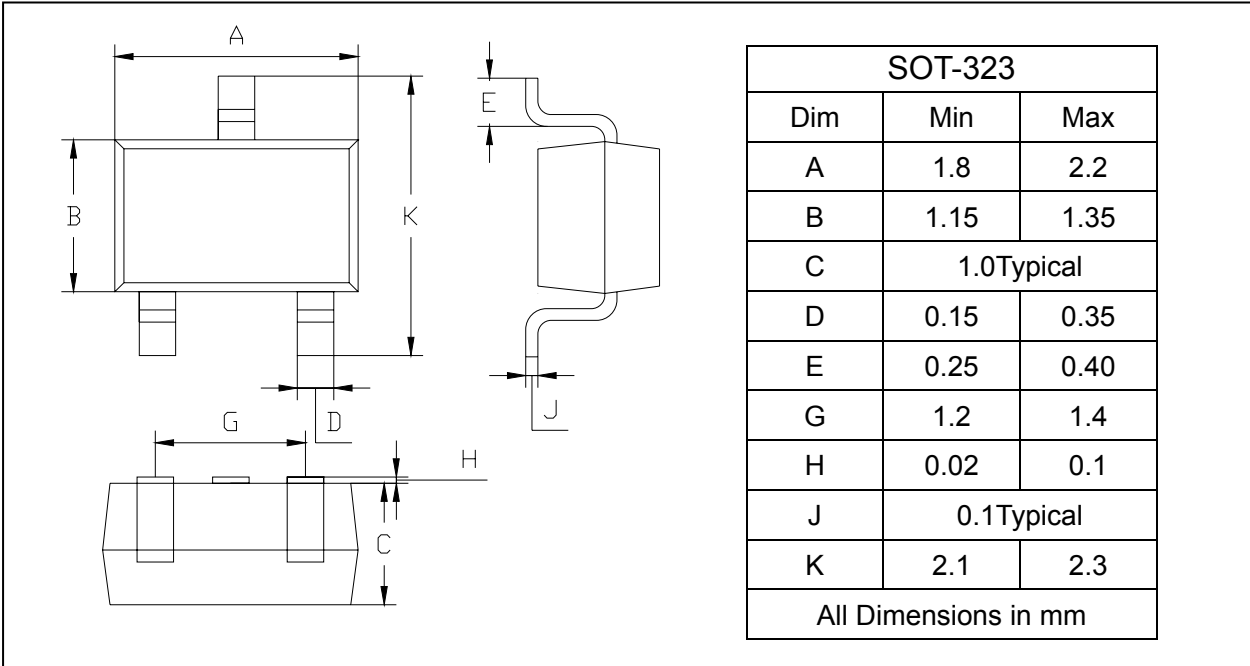
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PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



PACKAGE INFORMATION

Device	Package	Shipping
MMST4401	SOT-323	3000/Tape&Reel