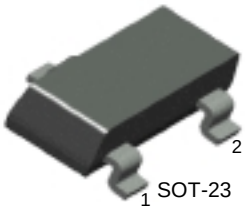
FAIRCHILD
SEMICONDUCTOR TM

KST1009F1/F2/F3/F4/F5

AM/FM RF Amplifier Transistor



SOT-23

1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_C	Collector Dissipation	350	mW
T_{STG}	Storage Temperature	150	°C

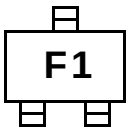
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB} =15V, I_E=0			100	nA
h_{FE}	DC Current Gain					
	: KST1009F1	V_{CE}=3V, I_C=0.5mA	30		60	
	: KST1009F2		40		80	
	: KST1009F3		60		120	
	: KST1009F4		90		180	
	: KST1009F5		135		270	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=10mA, I_B=1mA			0.3	V
f_T	Current Gain Bandwidth Product	I_C=1mA, V_{CE}=6V	150			MHz
C_{ob}	Output Capacitance	V_{CB}=6V, I_E=0, f=1MHz		2		pF
NF	Noise Figure	V_{CE}=6V, I_C=0.5mA f=1MHz, R_G=500Ω		2.5		dB

Marking Code

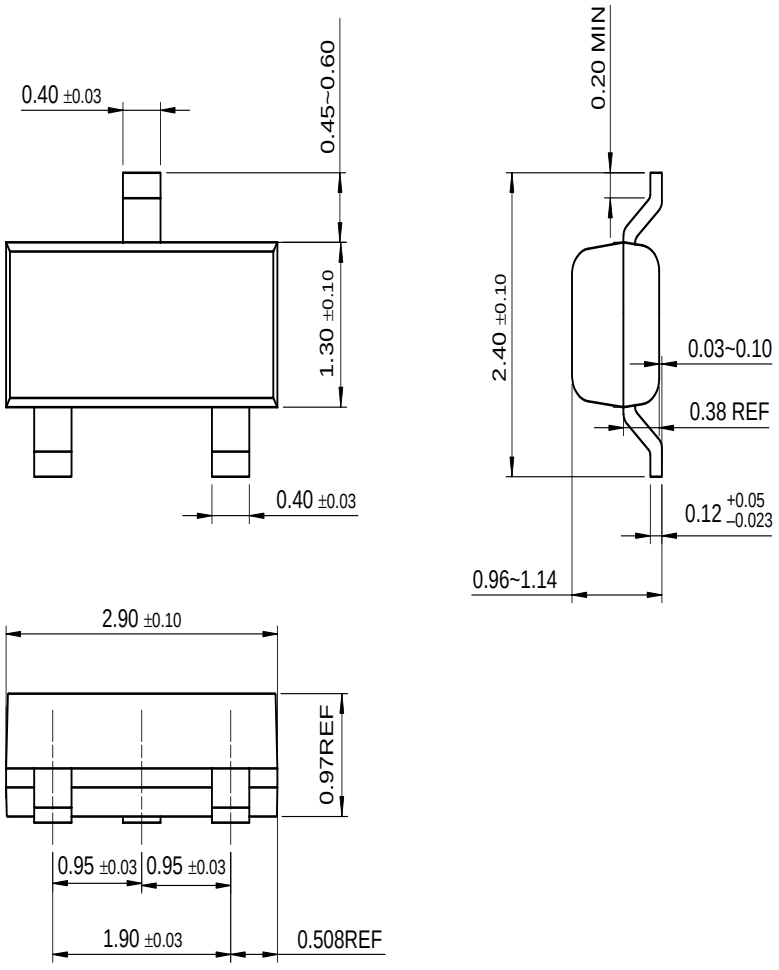
Type	KST1009F1	KST1009F2	KST1009F3	KST1009F4	KST1009F5
Mark	F1	F2	F3	F4	F5

Marking



Package Demensions

SOT-23



Dimensions in Millimeters

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