## **Excellent Integrated System Limited**

Stocking Distributor

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<u>Fairchild Semiconductor</u> <u>KST2484MTF</u>

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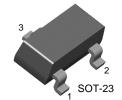






### KST2484

### **Low Noise Transistor**



1. Base 2. Emitter 3. Collector

## **NPN Epitaxial Silicon Transistor**

### **Absolute Maximum Ratings** T<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector Base Voltage	60	V
V <sub>CEO</sub>	Collector-Emitter Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current	50	mA
P <sub>C</sub>	Collector Power Dissipation	350	mW
T <sub>STG</sub>	Storage Temperature	150	°C

Refer to KSP5088 for graphs

### **Electrical Characteristics** T<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> =10μA, I <sub>E</sub> =0	60		V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =0	60		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> =10μA, I <sub>C</sub> =0	5		V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> =45V, I <sub>E</sub> =0		10	nA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}=5V, I_{C}=0$		10	nA
h <sub>FE</sub>	DC Current Gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA V <sub>CE</sub> =5V, I <sub>C</sub> =10mA	250	800	
		0L . 0			
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =1mA, I <sub>B</sub> =0.1mA		0.35	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	I <sub>C</sub> =1mA, V <sub>CE</sub> =5V		0.95	V
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> =5.0V, I <sub>E</sub> =0, f=1MHz,		6	pF
NF	Noise Figure	$I_C$ =10μA, $V_{CE}$ =5V $R_S$ =10KΩ, $f$ =1KHz		3	dB

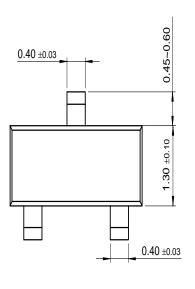


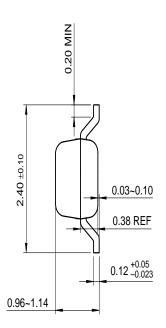


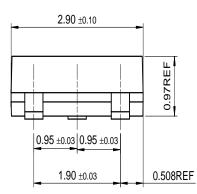
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## **Package Dimensions**

## **SOT-23**







Dimensions in Millimeters

# Distributor of Fairchild Semiconductor: Excellent Integrated System Limited Datasheet of KST2484MTF - TRANS NPN 60V 0.05A SOT-23

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	EnSigna™	I <sup>2</sup> C™	$OCX^{TM}$	RapidConfigure™	UHC™
	Across the board.	Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	$VCX^{TM}$	
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