

# KTC3881S

RevF Apr.-2017

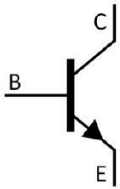
JF K\$) \*

E GE

Silicon NPN transistor in a SOT-23 Plastic Package.

Good linearity of  $f_T$ .

High frequency, VHF band amplifier application.



PIN 1 Base

PIN 2 Emitter

PIN 3 Collector

## / $h_{FE}$ Classifications & Marking

$h_{FE}$ Range	20~200
Marking	HHH

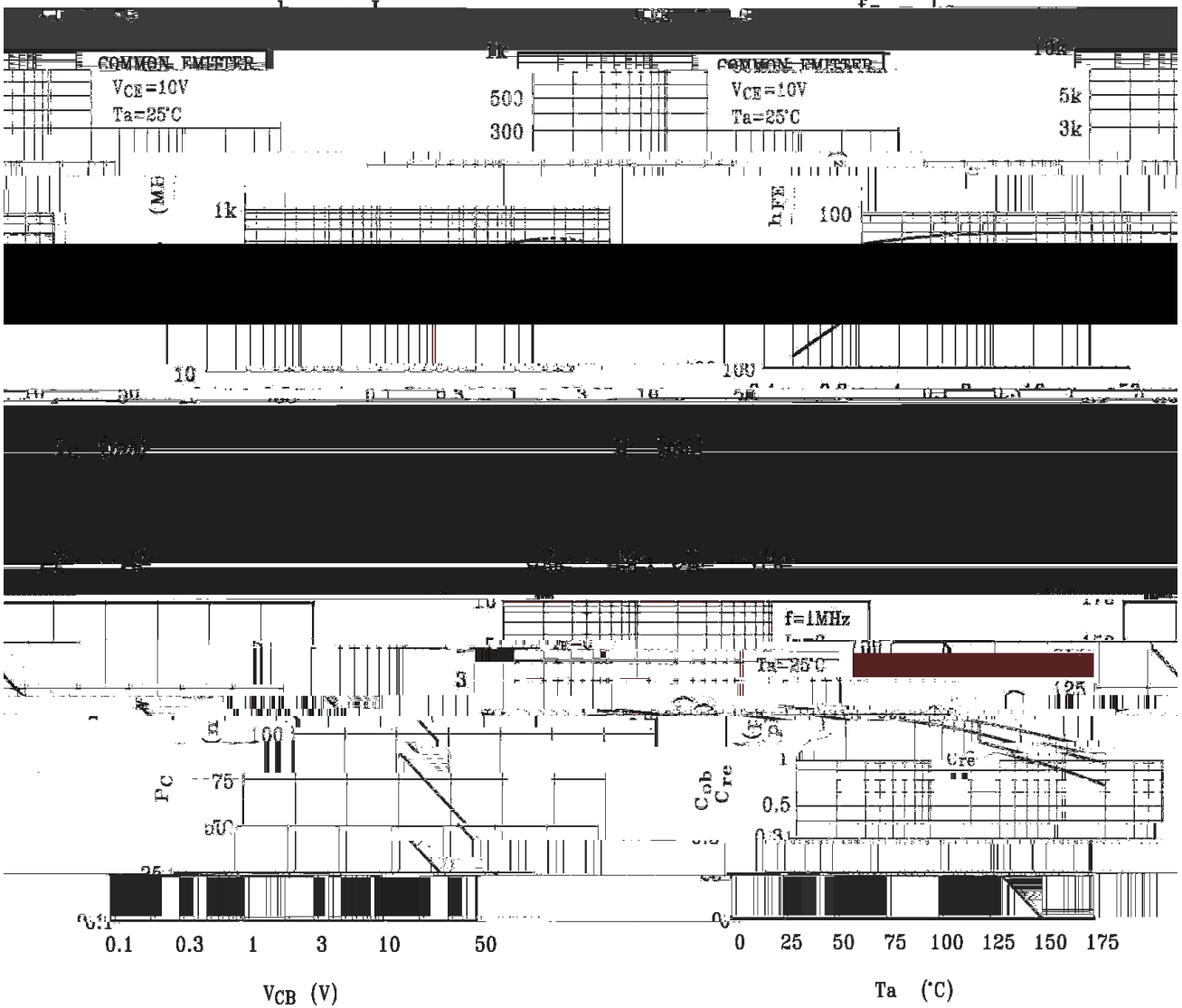
## / Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	30	V
Collector to Emitter Voltage	$V_{CEO}$	25	V
Emitter to Base Voltage	$V_{EBO}$	4.0	V
Collector Current	$I_C$	50	mA
Base Current	$I_B$	25	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=10mA$	25			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=30V$ $I_E=0$			0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=3.0V$ $I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=10V$ $I_C=10mA$	20	70	200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=15mA$ $I_B=1.5mA$			0.2	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=15mA$ $I_B=1.5mA$			1.5	V
Transition Frequency	$f_T$	$V_{CE}=10V$ $I_C=10mA$	250	600		MHz
Output Capacitance	$C_C$	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		1.1	1.6	pF
Collector- Base Time Constant	$C_{c.rbb}$	$V_{CB}=10V$ $f=30MHz$ $I_E=1.0mA$			25	pS

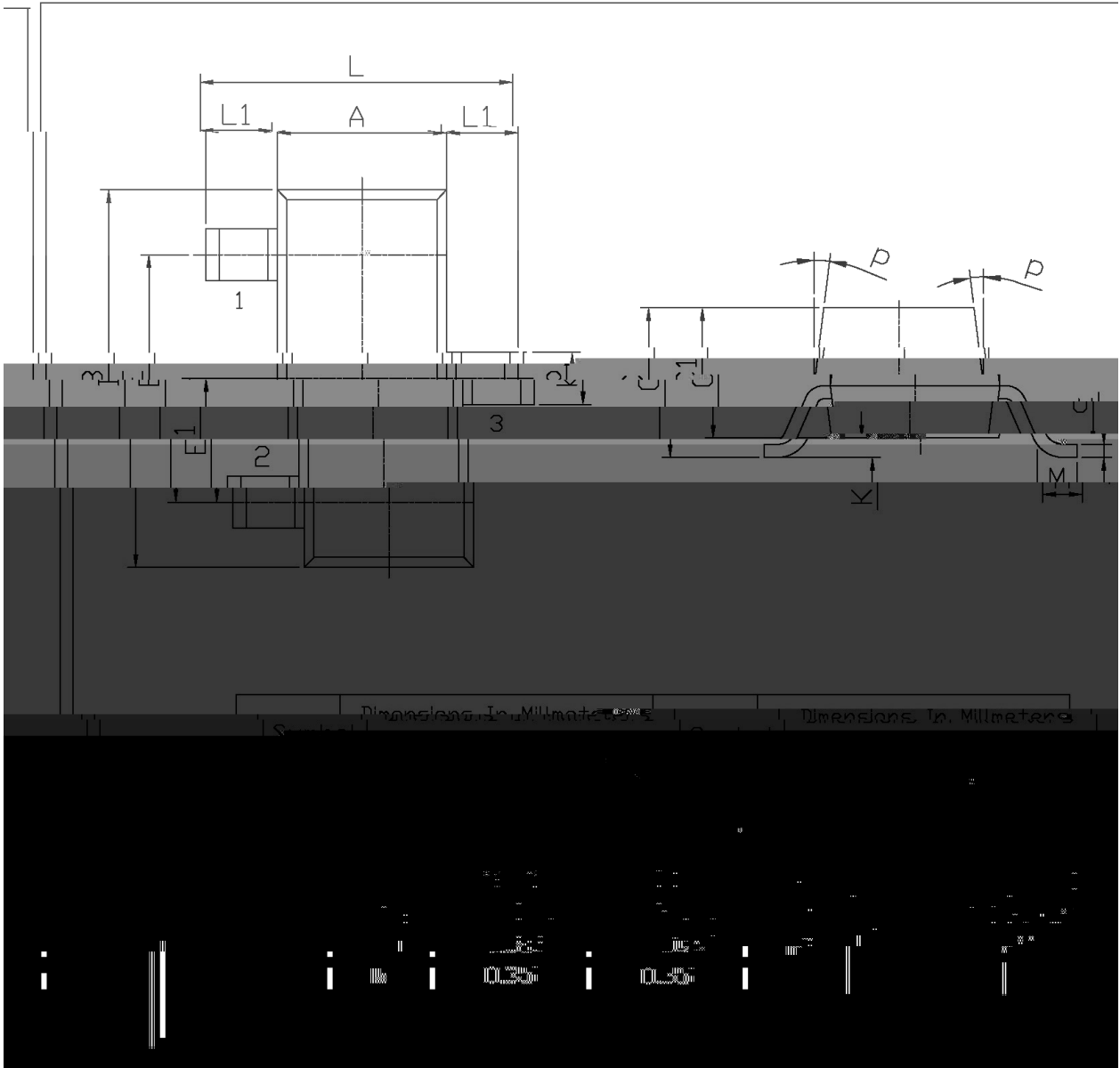
/ Electrical Characteristic Curve



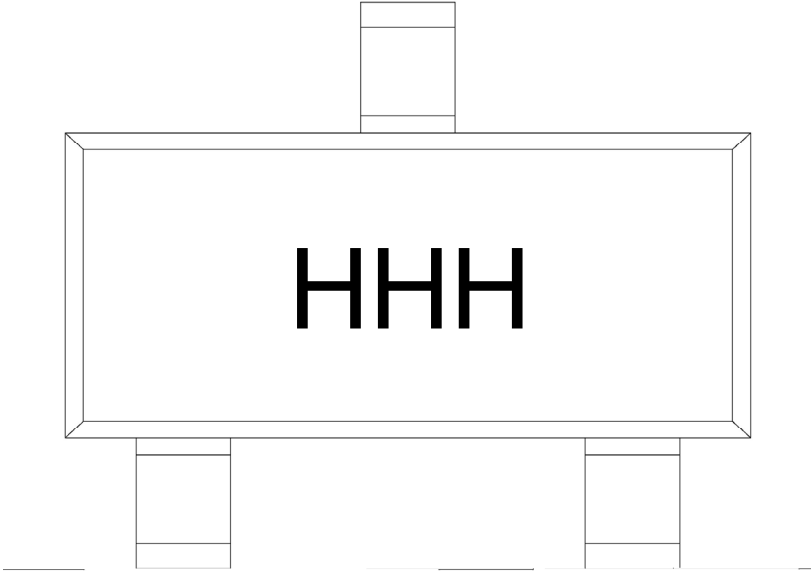
/ Package Dimensions

SOT-23

单位: mm

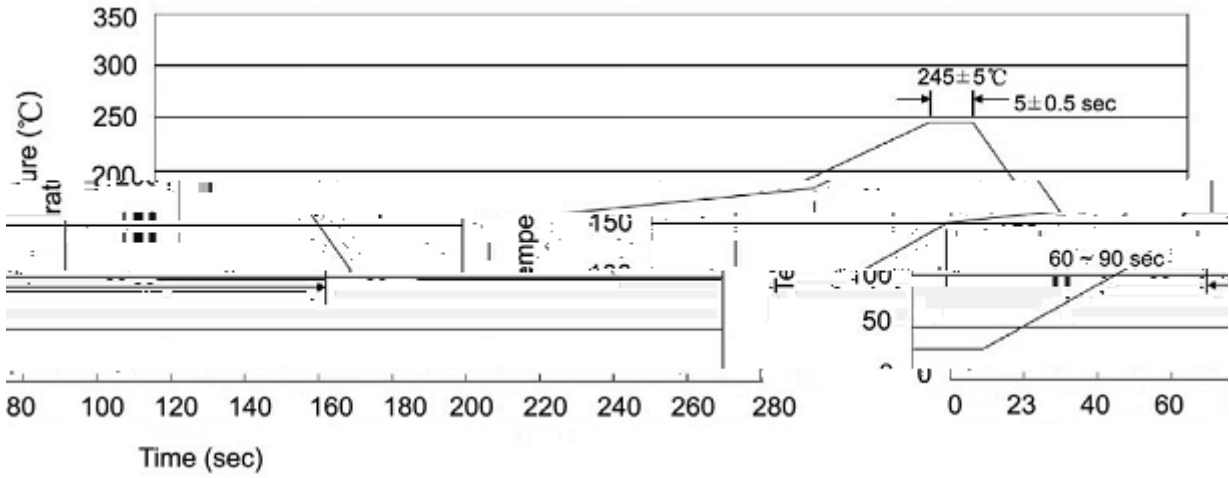


**/ Marking Instructions**



?     Company Code  
HH     Product Type  
Note:  
?     Company Code  
HH     Product Type

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- |   |        |     |            |          |   |
|---|--------|-----|------------|----------|---|
| 1 | 25     | 150 | 60         | 90sec;   | 1.Preheating:25~150 , Time:60~90sec.      |
| 2 | 245..5 |     | 5..0.5sec; |          | 2.Peak Temp.:245..5 , Duration:5..0.5sec. |
| 3 |        |     | 2          | 10 /sec. | 3. Cooling Speed: 2~10 /sec.              |

/ Resistance to Soldering Heat Test Conditions

260..5                      10..1 sec.                      Temp.:260..5                      Time:10..1 sec

/ Packaging SPEC.

/ REEL

Package Type                      Units