

## NPN Silicon Epitaxial Planar Transistor

**KTC3879**

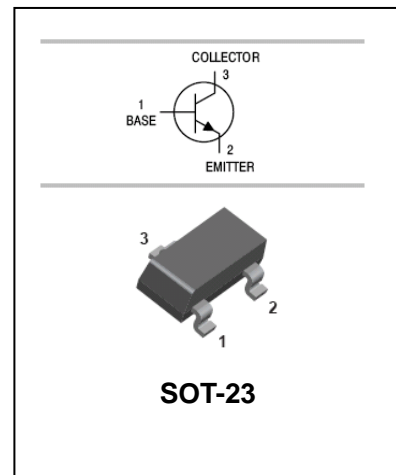
### FEATURES



- High power gain.

### APPLICATIONS

- High frequency application.
- HF,VHF band amplifier application.



### ORDERING INFORMATION

Type No.	Marking	Package Code
KTC3879	RR/RO/RV	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	35	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
I <sub>C</sub>	Collector Current	50	mA
I <sub>E</sub>	Emitter Current	-50	mA
P <sub>C</sub>	Collector Power Dissipation	150	mW
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-55~150	°C

**NPN Silicon Epitaxial Planar Transistor****KTC3879****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu A, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=35V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			1.0	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=12V, I_C=2mA$	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=1mA$	100		400	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	1.4	2.0	3.2	pF

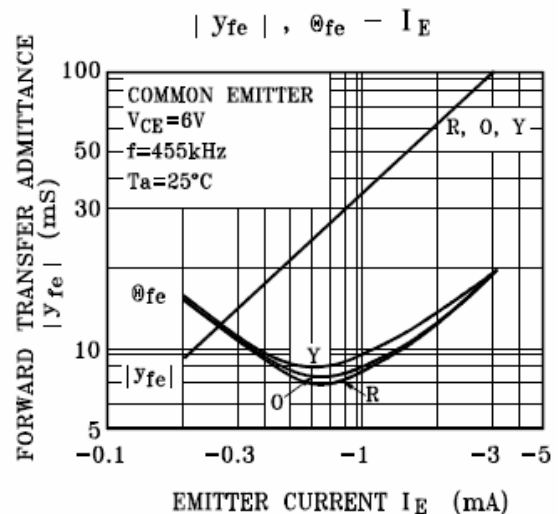
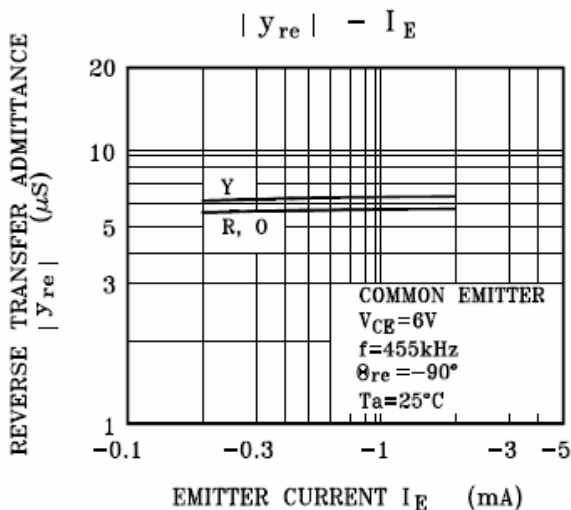
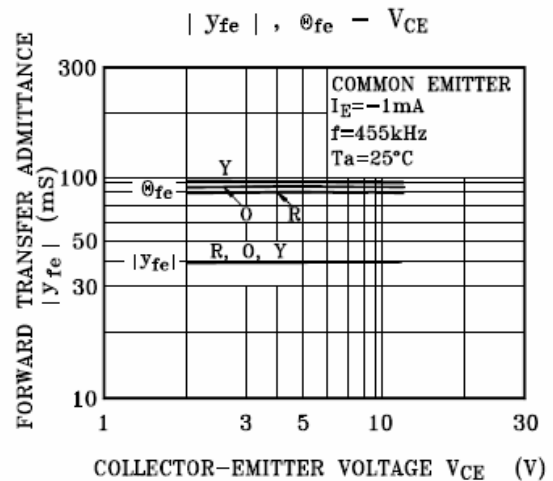
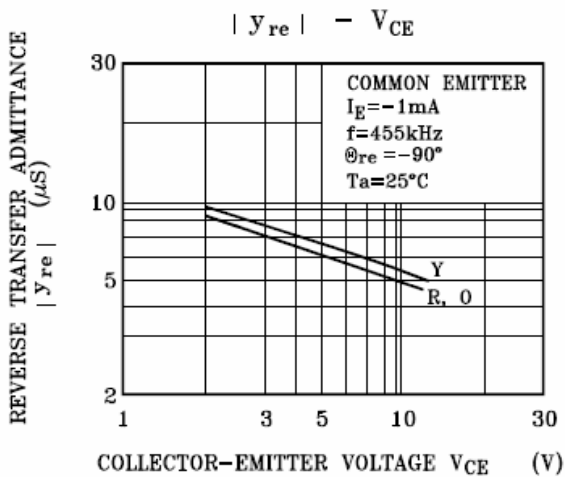
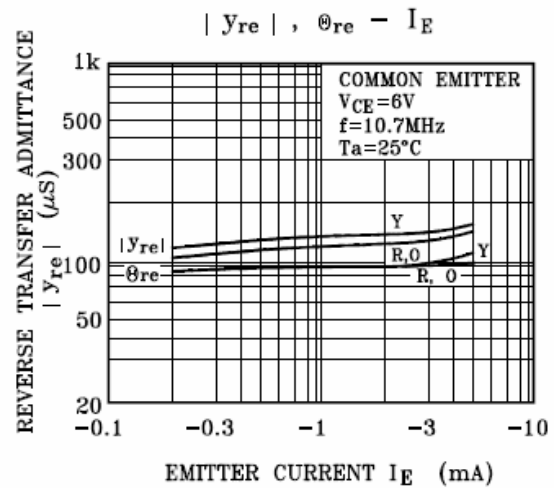
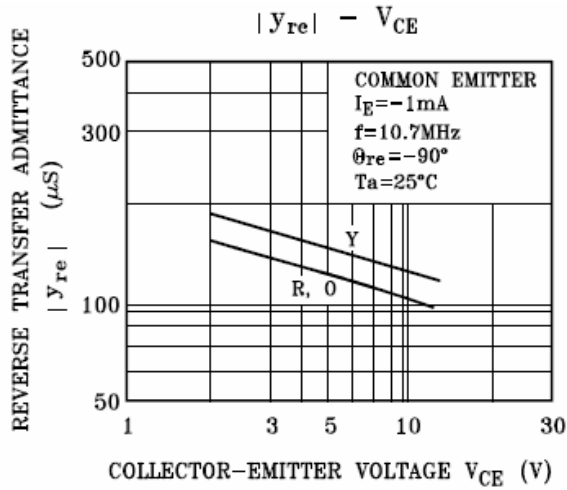
**CLASSIFICATION OF  $h_{FE}$** 

Rank	R	O	Y
Range	40-80	70-140	120-240
Marking	RR	RO	RY

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TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



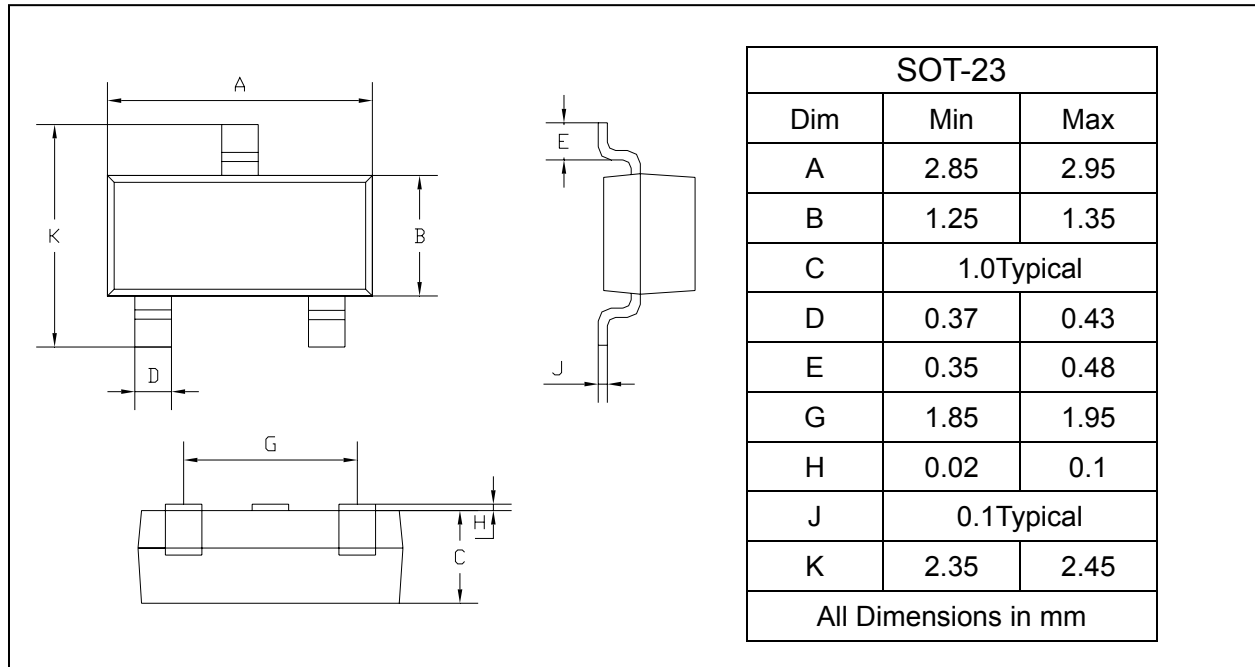
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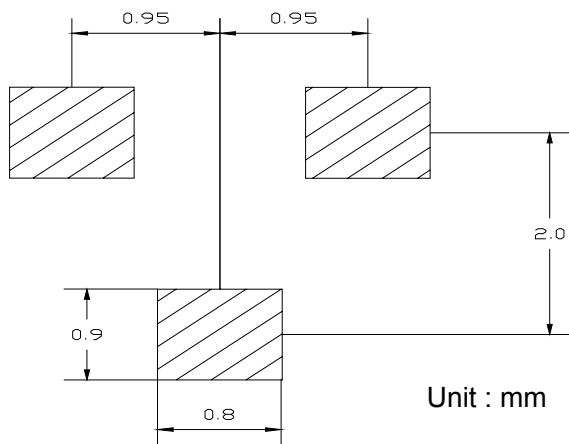
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
KTC3879	SOT-23	3000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)