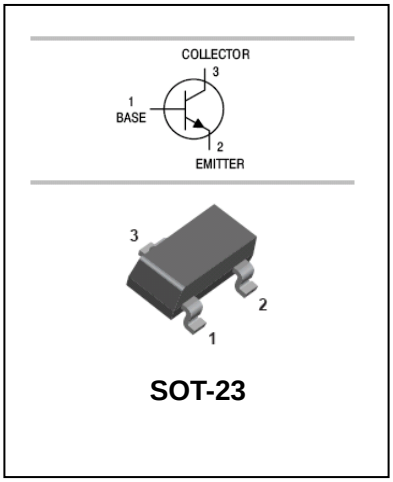
NPN Silicon Epitaxial Planar Transistor **KTC3879**

FEATURES

Lead-free

- High power gain.



SOT-23

APPLICATIONS

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

ORDERING INFORMATION

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

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current	50	mA
I_E	Emitter Current	-50	mA
P_C	Collector Power Dissipation	150	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

NPN Silicon Epitaxial Planar Transistor **KTC3879**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

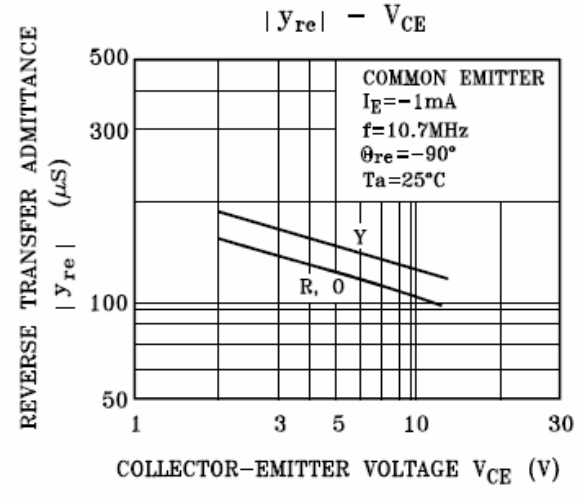
Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=100μA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}=35V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			1.0	μA
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

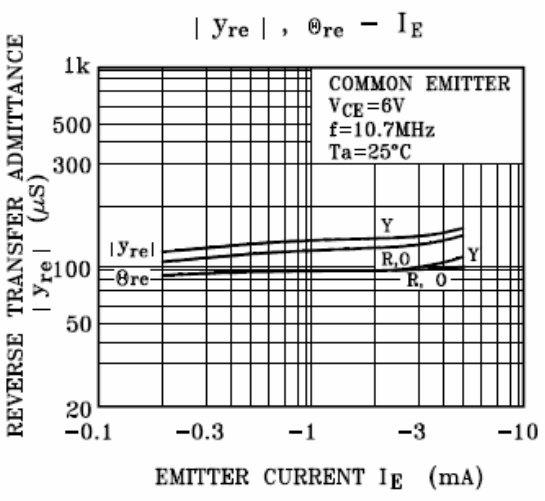
CLASSIFICATION OF h_{FE}

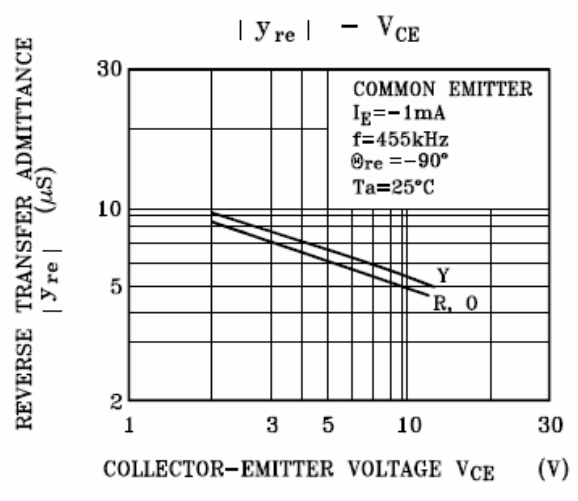
Rank	**R**	**O**	**Y**
Range	40-80	70-140	120-240
Marking	RR	RO	RY

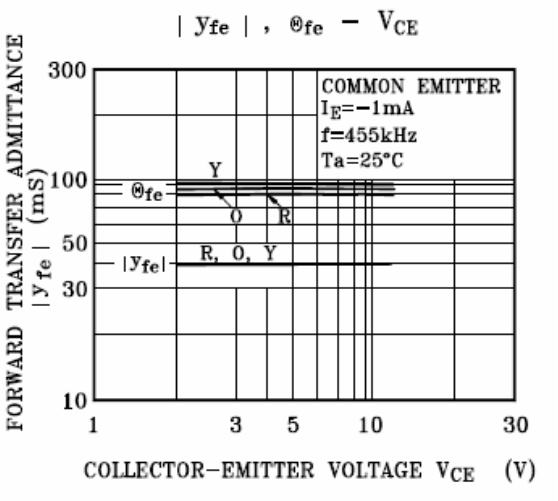
NPN Silicon Epitaxial Planar Transistor **KTC3879**

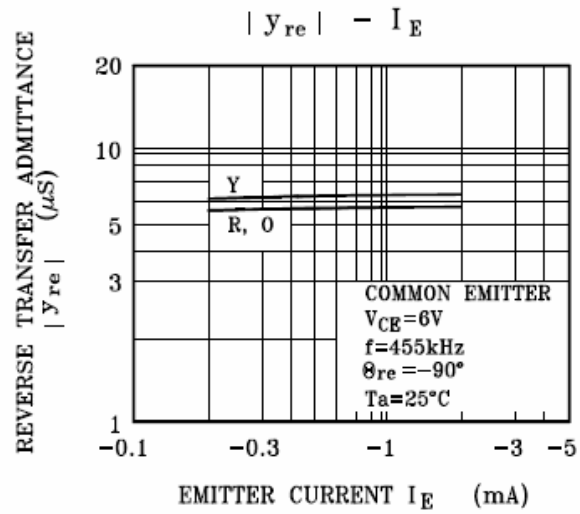
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

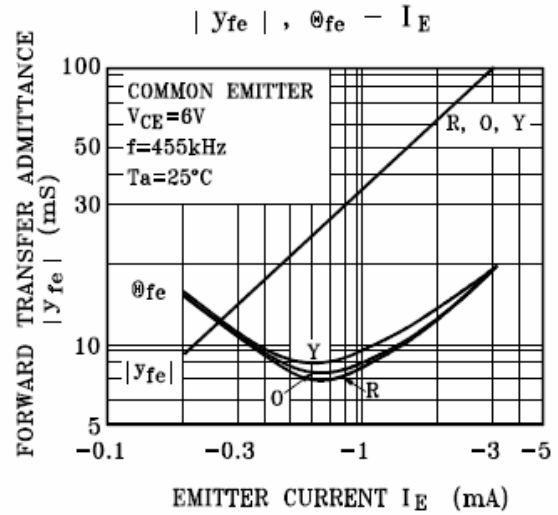








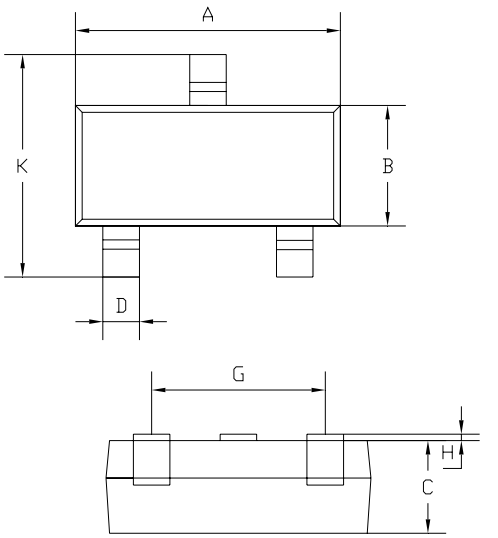




NPN Silicon Epitaxial Planar Transistor **KTC3879**

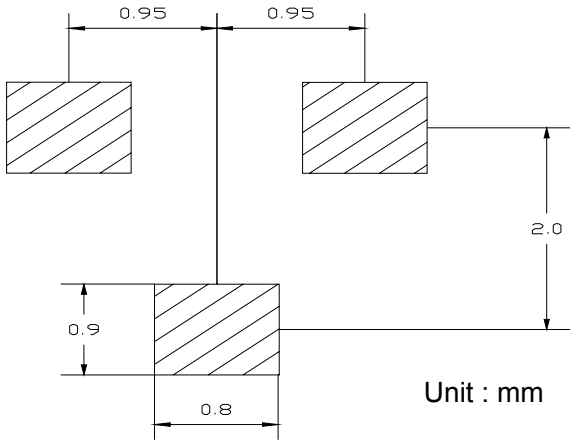
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

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