



NPN Silicon Epitaxial Planar Transistor

KTC3879

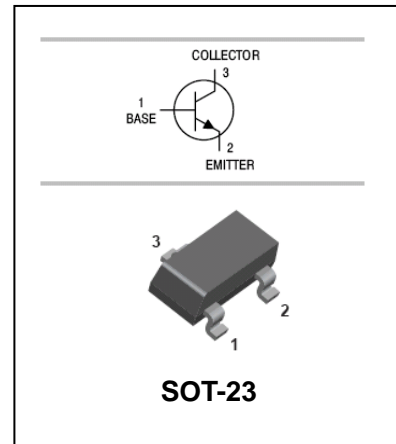
FEATURES

- 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 _{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 to +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	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}

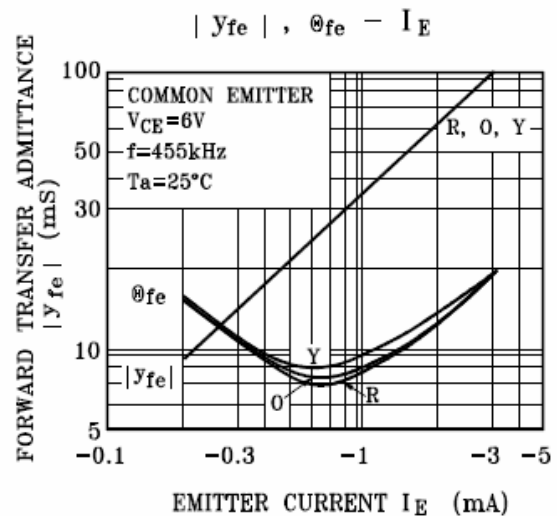
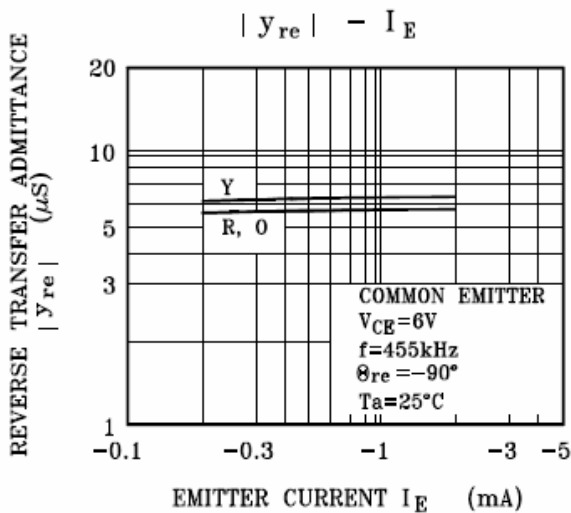
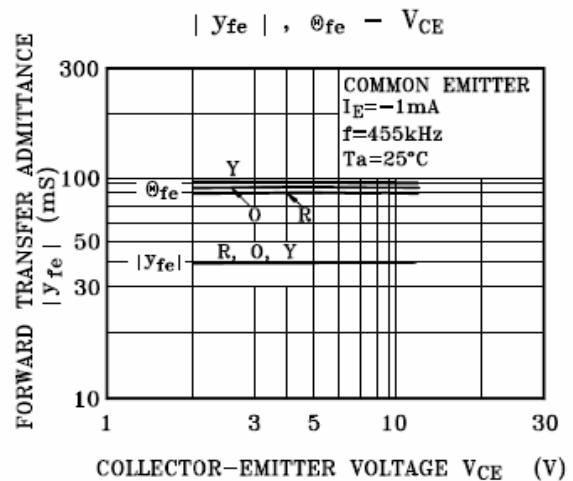
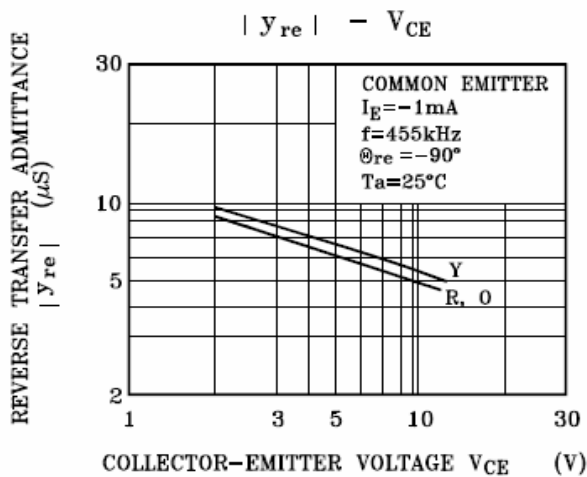
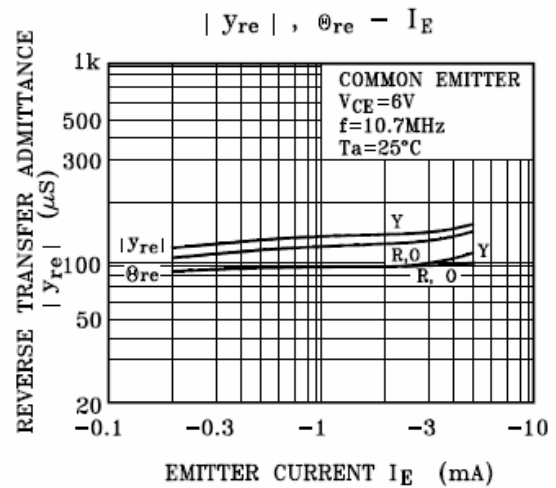
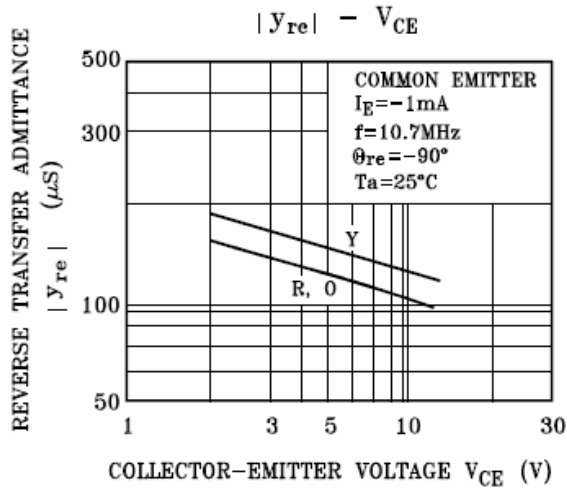
Rank	R	O	Y
Range	40-80	70-140	120-240
Marking	RR	RO	RY



NPN Silicon Epitaxial Planar Transistor

KTC3879

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



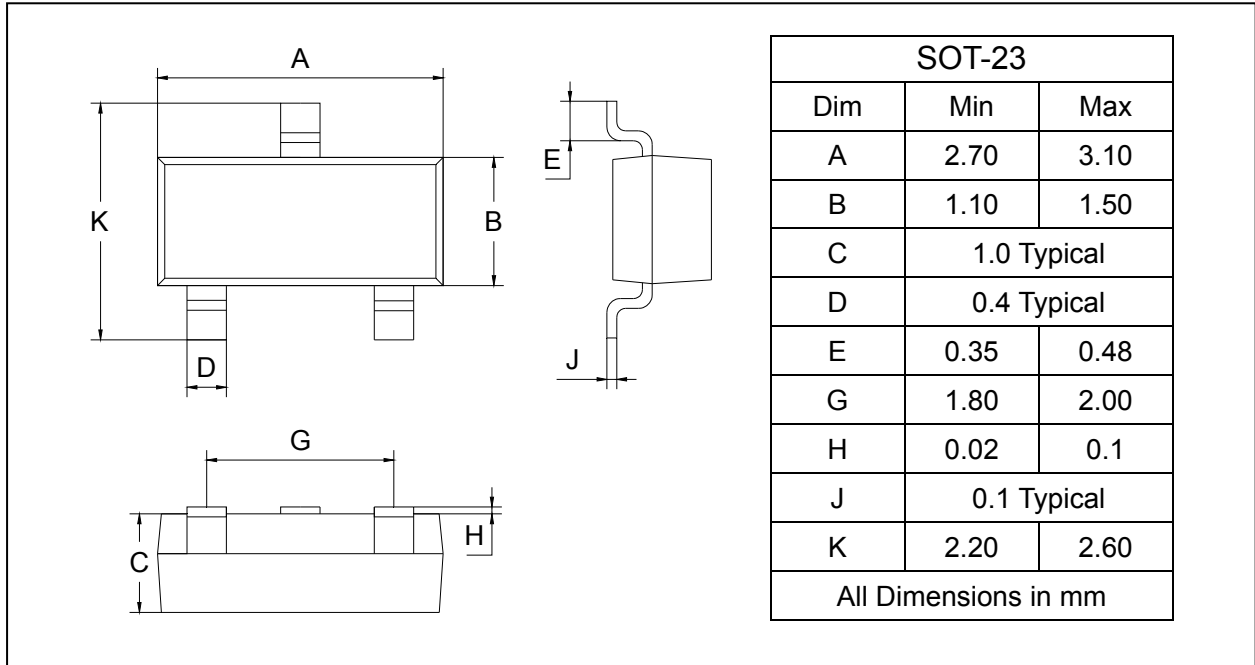
NPN Silicon Epitaxial Planar Transistor

KTC3879

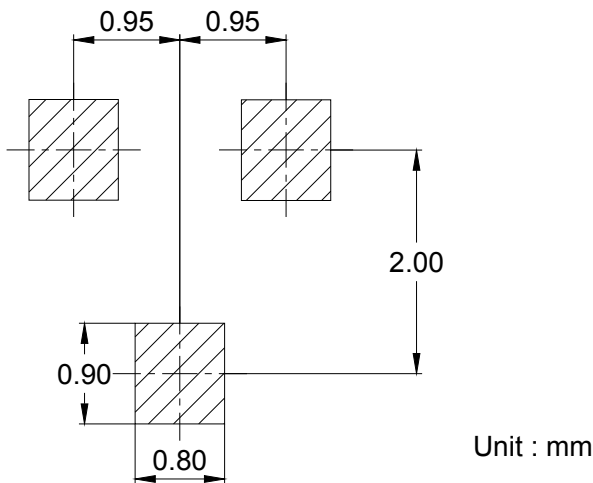
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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