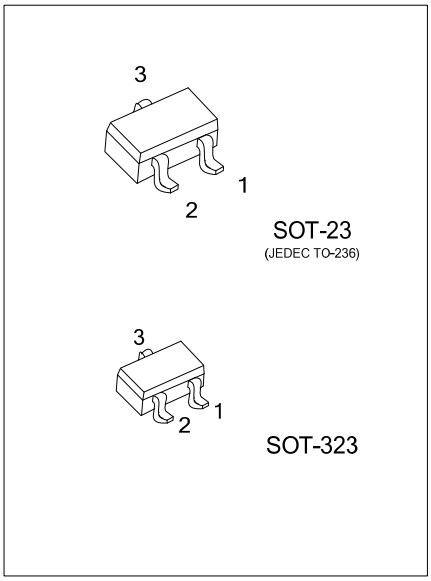
FIELD EFFECT TRANSISTOR SILICON N CHANNEL JUNCTION TYPE



■ DESCRIPTION

The UTC **K1875** is an N-channel JFET, it uses UTC's advanced technology to provide customers low input capacitance and high forward transfer admittance.

The UTC **K1875** is suitable for high frequency amplifier and audio frequency amplifier applications, etc.

■ FEATURES

* High forward transfer admittance
* Low input capacitance

■ ORDERING INFORMATION

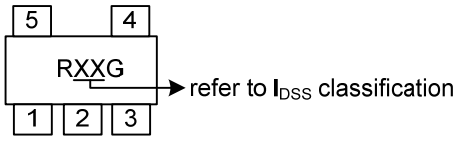
Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
K1875G-xx-AE3-R	SOT-23	D	S	G	Tape Reel
K1875G-xx-AQ3-R	SOT-723	D	S	G	Tape Reel

Note: Pin Assignment: D: Drain S: Source G: Gate

K1875G-xx-AE3-R
(1)Packing Type
(2)Package Type
(3)Rank
(4)Green Package

(1) R: Tape Reel
(2) AE3: SOT-23, AL3: SOT-323
(3) xx: refer to Classification of I_{DSS}
(4) G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Gate-Drain Voltage	V_{GDS}	-20	V
Gate-Current	I_G	10	mA
Drain Power Dissipation	P_D	100	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55~125	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A =25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Gate Leakage Current	I_{GSS}	V_{GS}=-15V, V_{DS}=0V			-1.0	nA
Gate-Drain Breakdown Voltage	$V_{(BR)GDS}$	V_{DS}=0V, I_G=-100μA	-20			V
Drain Current	I_{DSS}	V_{DS}=5V, V_{GS}=0V	6		32	mA
Gate-Source Cut-Off Voltage	V_{GS} (OFF)	V_{DS}=5V, I_D=1μA			-2.5	V
Forward Transfer Admittance	$\|Y_{fs}\|$	V_{DS}=5V, V_{GS}=0V, f=1kHz	15	25		mS
Input Capacitance	C_{iss}	V_{DS}=5V, V_{GS}=0V, f=1MHz		7.5	10	pF
Reverse Transfer Capacitance	C_{rss}	V_{DG}=5V, I_D=0V, f=1MHz		2	3	pF

■ CLASSIFICATION OF I_{DSS}

RANK	GR	BL	V
RANGE	6~12	10~20	16~32