

HIGH SPEED SWITCHING APPLICATION.

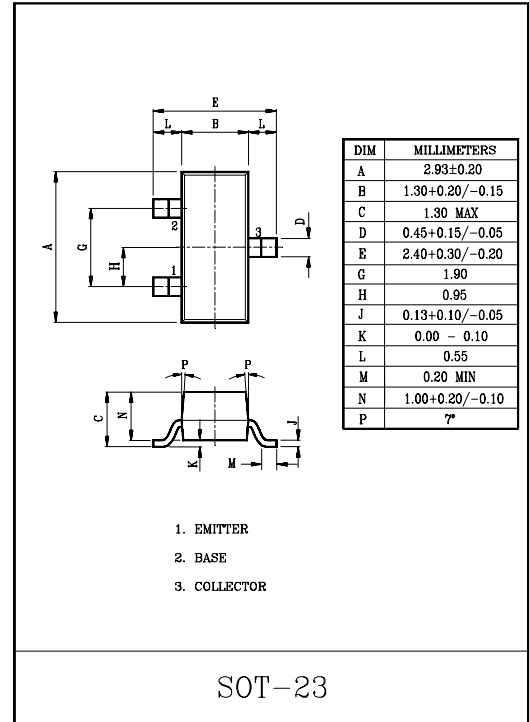
### FEATURES

- Excellent High Frequency Characteristics.
- Excellent Switching Characteristics.

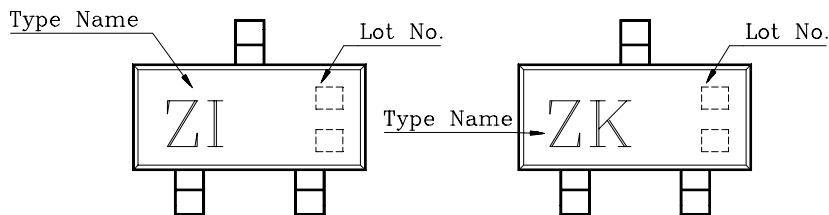
### MAXIMUM RATINGS(Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	15	V
Emitter-Base Voltage	V <sub>EBO</sub>	4.5	V
Collector Current	I <sub>C</sub>	500	mA
Collector Power Dissipation (Ta=25°C)	* P <sub>C</sub>	350	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C

\* Package Mounted On 99.5% Alumina 10x8x0.6mm



### Marking



### MARK SPEC

TYPE	MARK
KTN2369S	Z I
KTN2369AS	Z K

# KTN2369S/AS

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I <sub>CBO</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0	-	-	0.4	μA
			V <sub>CB</sub> =20V, I <sub>E</sub> =0, Ta=125°C	-	-	30	
Collector-Base Breakdown Voltage		V <sub>(BR)CBO</sub>	I <sub>C</sub> =10μA, I <sub>E</sub> =0	40	-	-	V
Collector-Emitter Breakdown Voltage *		V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	15	-	-	
Emitter-Base Breakdown Voltage		V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	4.5	-	-	
DC Current Gain *	KTN2369S	h <sub>FE</sub>	I <sub>C</sub> =10mA, V <sub>CE</sub> =1.0V	40	-	120	
	KTN2369AS			-	-	120	
	KTN2369S		I <sub>C</sub> =10mA, V <sub>CE</sub> =1.0V, Ta=-55°C	20	-	-	
	KTN2369AS		I <sub>C</sub> =10mA, V <sub>CE</sub> =0.35V, Ta=-55°C	20	-	-	
	KTN2369AS		I <sub>C</sub> =100mA, V <sub>CE</sub> =2.0V	20	-	-	
	KTN2369S		I <sub>C</sub> =100mA, V <sub>CE</sub> =20V	20	-	-	
Collector-Emitter Saturation Voltage *		V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA	-	-	0.25	V
Base-Emitter Saturation Voltage *		V <sub>BE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA	0.70	-	0.85	V
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> =5.0V, I <sub>E</sub> =0, f=1.0MHz	-	-	4.0	pF
Storage Time	KTN2369AS	t <sub>stg</sub>	I <sub>C</sub> =100mA, I <sub>B1</sub> =-I <sub>B2</sub> =10mA, V <sub>CC</sub> =10V	-	-	13	nS
Turn-on Time		t <sub>on</sub>	I <sub>C</sub> =10mA, I <sub>B1</sub> =3.0mA, V <sub>CC</sub> =3.0V, I <sub>B2</sub> =-1.5mA	-	-	12	
Turn-off Time	KTN2369AS	t <sub>off</sub>	I <sub>C</sub> =10mA, I <sub>B1</sub> =3.0mA, I <sub>B2</sub> =-1.5mA, V <sub>CC</sub> =3.0V	-	-	15	

\*Pulse Test : Pulse Width ≤ 300μS, Duty Cycle ≤ 2.0%