

# **KTN2369S/AS** EPITAXIAL PLANAR NPN TRANSISTOR

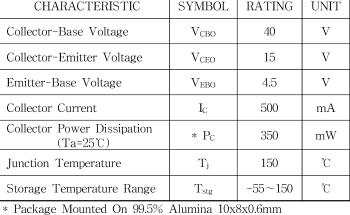
## HIGH SPEED SWITCHING APPLICATION.

### **FEATURES**

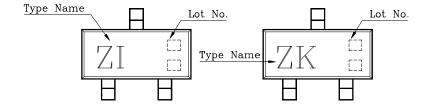
- · Excellent High Frequency Characteristics.
- · Excellent Switching Characteristics.

### MAXIMUM RATINGS(Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	40	V
Collector-Emitter Voltage	$V_{\text{CEO}}$	15	V
Emitter-Base Voltage	$V_{EBO}$	4.5	V
Collector Current	$I_{\rm C}$	500	mA
Collector Power Dissipation (Ta=25°C)	* P <sub>C</sub>	350	mW
Junction Temperature	$T_{j}$	150	$^{\circ}$
Storage Temperature Range	$T_{\mathrm{stg}}$	-55~150	${\mathbb C}$

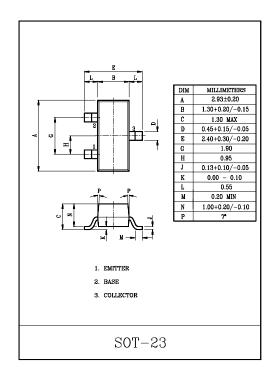


# Marking



### MARK SPEC

TYPE	MARK
KTN2369S	Z I
KTN2369AS	Z K



# KTN2369S/AS

# ELECTRICAL CHARACTERISTICS (Ta= $25^{\circ}$ C)

CHARACTER	ISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$ m I_{CBO}$	$V_{CB}$ =20V, $I_{E}$ =0	-	-	0.4	μΑ
			$V_{CB}$ =20V, $I_{E}$ =0, $Ta$ =125°C	-	-	30	
Collector-Base Breakdown Voltage		V <sub>(BR)CBO</sub>	$I_{C}=10\mu A,  I_{E}=0$	40	-	-	
Collector-Emitter Breakdown Voltage	*	V <sub>(BR)CEO</sub>	$I_C=10\text{mA},  I_B=0$	15	-	-	V
Emitter-Base Breakdown Voltage		$V_{\rm (BR)EBO}$	$I_{E}=10\mu A,  I_{C}=0$	4.5	-	-	
DC Current * Gain	KTN2369S	h <sub>FE</sub>	$I_{C}$ =10mA, $V_{CE}$ =1.0V	40	_	120	
	KTN2369AS			-	-	120	
	KTN2369S		$I_C=10mA$ , $V_{CE}=1.0V$ , $Ta=-55$ °C	20	-	-	
	KTN2369AS		$I_{C}=10\text{mA}, V_{CE}=0.35\text{V}, T_{a}=-55^{\circ}\text{C}$	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	*	$V_{\text{CE}(\text{sat})}$	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA	-	-	0.25	V
Base-Emitter Saturation Voltage	*	$V_{\rm BE(sat)}$	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA	0.70	-	0.85	V
Collector Output Capacitance		$C_{ob}$	$V_{CB}$ =5.0V, $I_{E}$ =0, f=1.0MHz	-	-	4.0	pF
Storage Time	KTN2369AS	$t_{\rm stg}$	$ \begin{array}{ll} I_{C} \! = \! 100mA, & I_{B1} \! = \! -I_{B2} \! = \! 10mA, \\ V_{CC} \! = \! 10V \end{array} $	-	-	13	
Turn-on Time		t <sub>on</sub>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	-	12	nS
Turn-off Time	KTN2369AS	t <sub>off</sub>	$I_{C}=10\text{mA}, I_{B1}=3.0\text{mA}, I_{B2}=-1.5\text{mA}, V_{CC}=3.0V$	_	_	15	

<sup>\*</sup>Pulse Test : Pulse Width ≤300µS, Duty Cycle≤2.0%

Downloaded from **Elcodis.com** electronic components distributor