**TOSHIBA** HN2S01FU

## TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

# **HN2S01FU**

LOW VOLTAGE HIGH SPEED SWITCHING APPLICATION

HN2S01F is composed of 3 independent diodes.

Low Forward Voltage :  $V_F = 0.23V$  (TYP.) @ $I_F = 5mA$ 

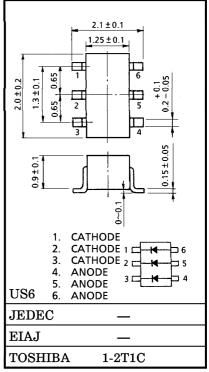
#### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Maximum (Peak) Reverse Voltage	$ m v_{RM}$	15	V	
Reverse Voltage	$v_{ m R}$	10	V	
Maximum (Peak) Forward Current	$I_{ extbf{FM}}$	200*	mA	
Average Forward Current	IO	100*	mA	
Surge Current (10ms)	$I_{ ext{FSM}}$	1*	A	
Power Dissipation	P	200	mW	
Junction Temperature	$T_{j}$	125	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~125	°C	
Operating Temperature Range	$T_{ m opr}$	-40~100	°C	

\* : This is the Maximum Ratings of single diode (Q1 or Q2

In the case of using 2 or 3 diodes, the Maximum Ratings per diode is 75% of the single diode one.

## Unit in mm

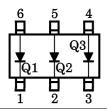


Weight: 6.2mg

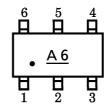
### ELECTRICAL CHARACTERISTICS (Q1, Q2, Q3 COMMON Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V <sub>F</sub> (1)	$I_{\mathbf{F}} = 1 \text{mA}$	_	0.18	_	
	$V_{\mathbf{F}}(2)$	$I_{\mathbf{F}} = 5 \text{mA}$	ı	0.23	0.30	V
	$V_{\mathbf{F}}(3)$	$I_{ m F} = 100 { m mA}$		0.35	0.50	
Reverse Current	$I_{\mathbf{R}}$	$V_R = 10V$			20	$\mu$ A
Total Capacitance	$\mathrm{C}_{\mathrm{T}}$	$V_R=0$ , f=1MHz		20	40	pF

## PIN ASSIGNMENT (TOP VIEW)



## **MARKING**

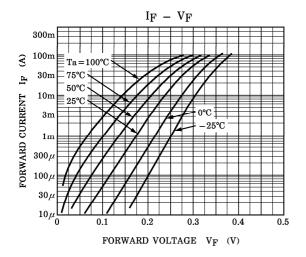


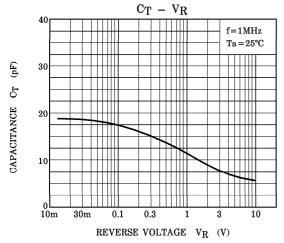
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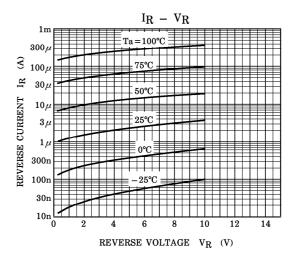
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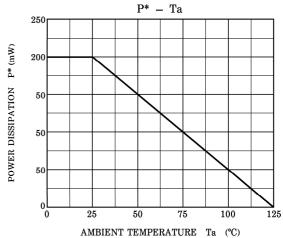
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\* : Total Rating