

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

## HN2S01F

Low Voltage High Speed Switching Application

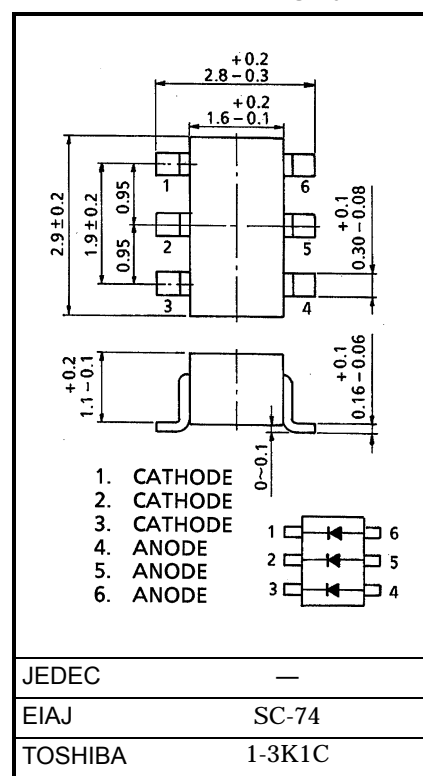
Unit in mm

- HN2S01F is composed of 3 independent diodes.
- Low reverse current:  $V_F = 0.23V$  (typ.) @  $I_F = 5mA$

### Maximum Ratings ( $T_a = 25^\circ C$ )

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	$V_{RM}$	15	V
Reverse voltage	$V_R$	10	V
Maximum (peak) forward current	$I_{FM}$	200 *	mA
Average forward current	$I_O$	100 *	mA
Surge current (10ms)	$I_{FSM}$	1 *	A
Power dissipation	P	300	mW
Junction temperature	$T_j$	125	$^\circ C$
Storage temperature range	$T_{stg}$	-55~125	$^\circ C$
Operating temperature range	$T_{opr}$	-40~100	$^\circ C$

\* : This is maximum rating of single diode (Q1 or Q2 or Q3).  
In the case of using 2 ro 3 diodes, the maximum ratings per diodes is 75 % of the single diode one.



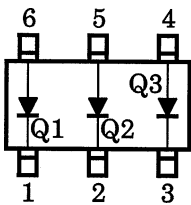
Weight: 0.015g

### Electrical Characteristics (Q1, Q2, Q3 Common, $T_a = 25^\circ C$ )

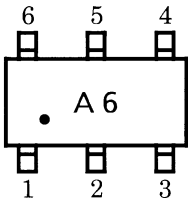
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F$ (1)	—	$I_F = 1mA$	—	0.18	—	V
	$V_F$ (2)	—	$I_F = 5mA$	—	0.23	0.30	
	$V_F$ (3)	—	$I_F = 100mA$	—	0.35	0.50	
Reverse current	$I_R$	—	$V_R = 10V$	—	—	20	$\mu A$
Total capacitance	$C_T$	—	$V_R = 0, f = 1MHz$	—	20	40	pF



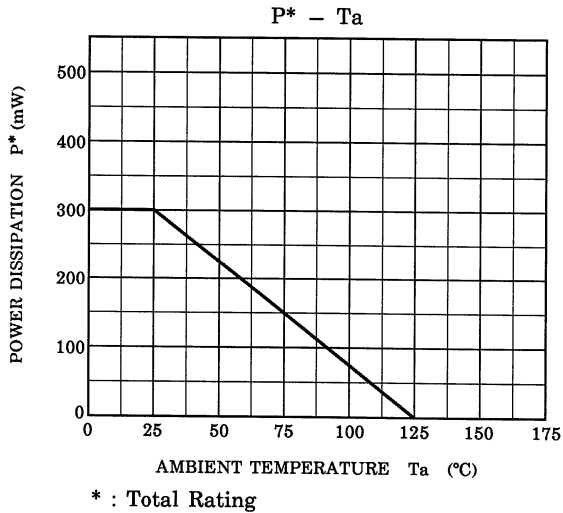
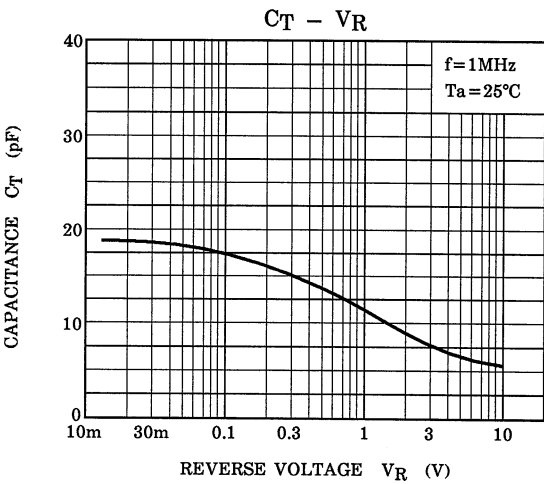
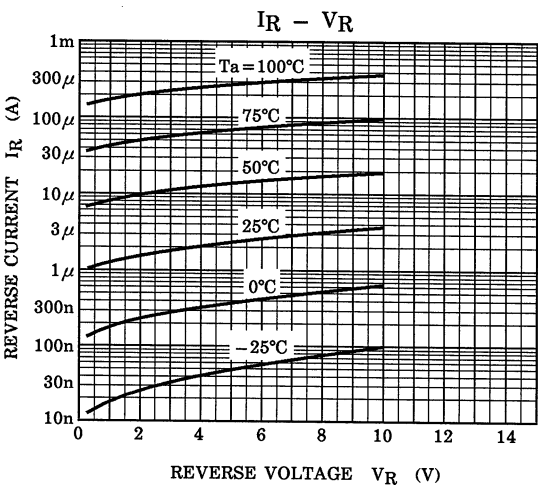
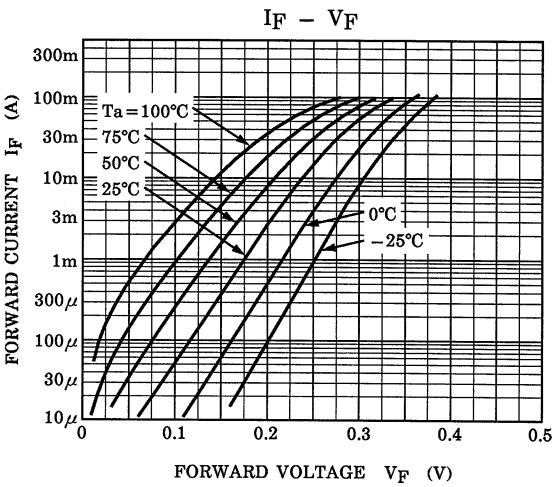
**Pin Assignment (Top View)**



**Marking**









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