

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# HN2S03FU

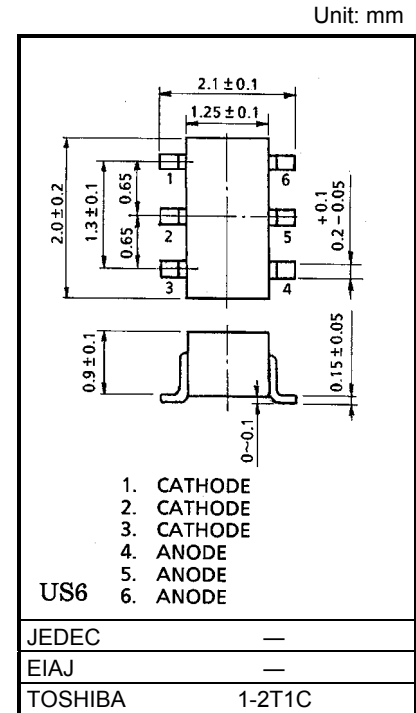
## High Speed Switching Application

- HN2S03FU is composed of 3 independent diodes.
- Low forward voltage :  $V_F (3) = 0.50V$  (typ.)
- Low reverse current :  $I_R = 0.5\mu A$  (max)
- Small total capacitance :  $C_T = 3.9pF$  (typ.)

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	$V_{RM}$	25	V
Reverse voltage	$V_R$	20	V
Maximum (peak) forward current	$I_{FM}$	100 *	mA
Average forward current	$I_O$	50 *	mA
Surge current (10ms)	$I_{FSM}$	1 *	A
Power dissipation	P	200 **	mW
Junction temperature	$T_j$	125	°C
Storage temperature range	$T_{stg}$	-55~125	°C
Operating temperature range	$T_{opr}$	-40~110	°C

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



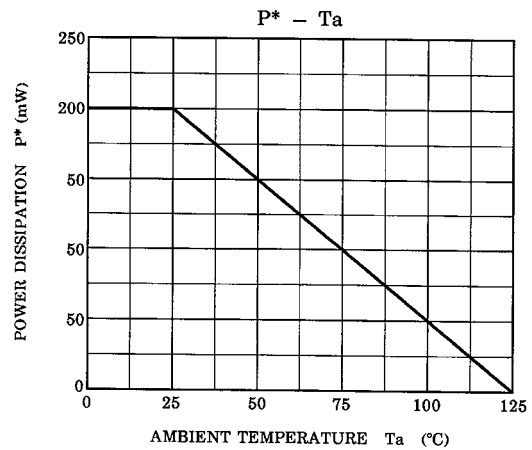
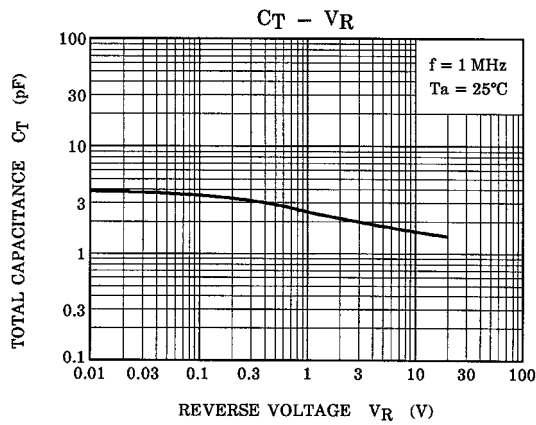
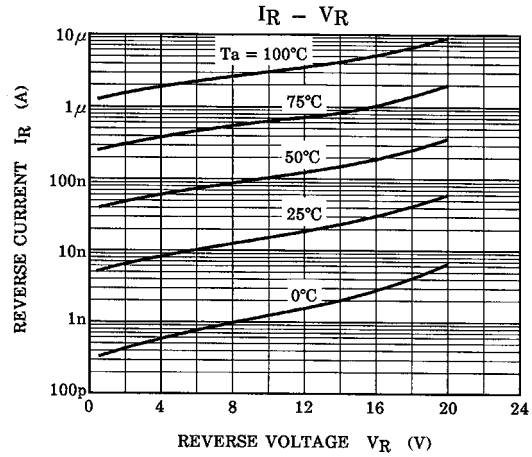
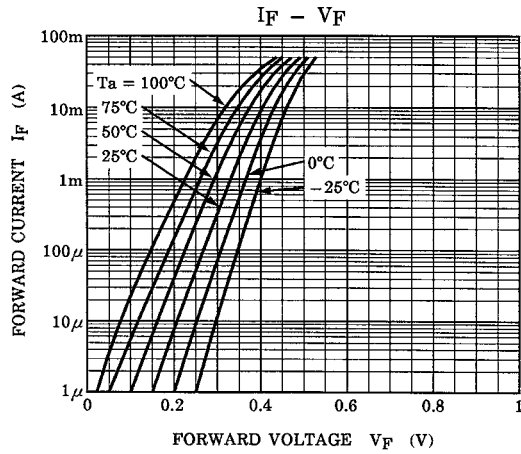
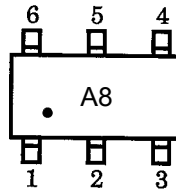
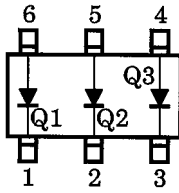
Weight: 6.2mg(Typ.)

## Electrical Characteristics (Q1, Q2, Q3 Common, Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F (1)$	—	$I_F = 1mA$	—	0.33	—	V
	$V_F (2)$	—	$I_F = 5mA$	—	0.38	—	
	$V_F (3)$	—	$I_F = 50mA$	—	0.50	0.55	
Reverse current	$I_R$	—	$V_R = 20V$	—	—	0.5	$\mu A$
Total capacitance	$C_T$	—	$V_R = 0, f = 1MHz$	—	3.9	—	pF

## Pin Assignment (Top View)

## Marking



\* : Total Rating

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