TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

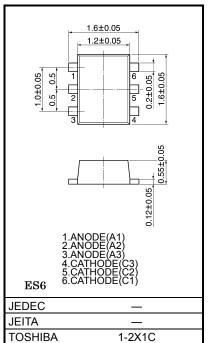
# HN2S03FE

High Speed Switching Applications

- HN2S03FE is composed of 3 independent diodes.
- Low forward voltage : V<sub>F (3)</sub> = 0.50V (typ.)
- Low reverse current : I<sub>R</sub>= 0.5µA (max)
- Small total capacitance : C<sub>T</sub> = 3.9pF (typ.)

### Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	V <sub>RM</sub>	25	V
Reverse voltage	V <sub>R</sub>	20	V
Maximum (peak) forward current	I <sub>FM</sub>	100 *	mA
Average forward current	Ι <sub>Ο</sub>	50 *	mA
Surge current (10ms)	I <sub>FSM</sub>	1 *	A
Power dissipation	Р	100 **	mW
Junction temperature	Тј	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C



Weight: 0.003g (Typ.)

\* : This is the maximum rating for a single diode (Q1, Q2 or Q3). If two or three diodes are used, the maximum rating

per diode is 75 % that of the single diode.

\*\* :Total rating

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

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 1mA	_	0.33	—	
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 5mA		0.38	—	V
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 50mA	-	0.50	0.55	
Reverse current	I <sub>R</sub>	_	V <sub>R</sub> = 20V		—	0.5	μA
Total capacitance	CT	_	V <sub>R</sub> = 0, f = 1MH <sub>z</sub>	_	3.9	_	pF

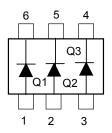
Unit: mm

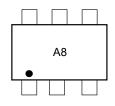
## TOSHIBA

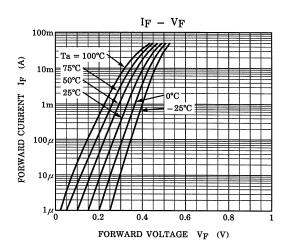
HN2S03FE

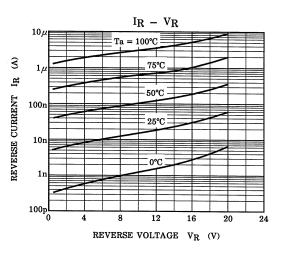
### Pin Assignment (Top View)

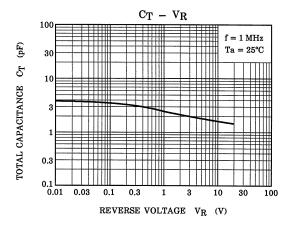
Marking

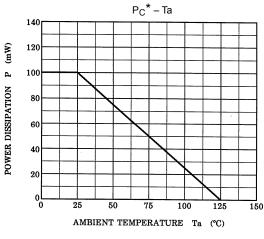












\*: Total Rating

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Handbook" etc..

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