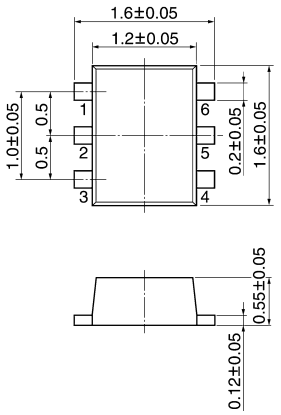
TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

HN2S03FE

High Speed Switching Applications

- HN2S03FE is composed of 3 independent diodes.
- Low forward voltage : $V_{F\ (3)}$ = 0.50V (typ.)
- Low reverse current : I_R= 0.5μA (max)
- Small total capacitance : C_T = 3.9pF (typ.)

Unit: mm



1.ANODE(A1)
2.ANODE(A2)
3.ANODE(A3)
4.CATHODE(C3)
5.CATHODE(C2)
6.CATHODE(C1)

ES6

JEDEC	—
JEITA	—
TOSHIBA	1-2X1C

Weight: 0.003g (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	100 **	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C

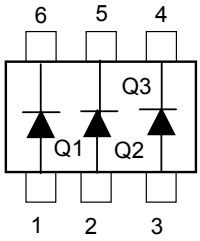
* : This is the maximum rating for a single diode (Q1, Q2 or Q3).
If two or three diodes are used, the maximum rating per diode is 75 % that of the single diode.

** :Total rating

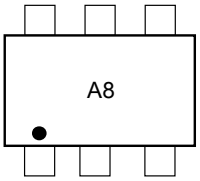
Electrical Characteristics (Q1, Q2, Q3 Common, Ta = 25°C)

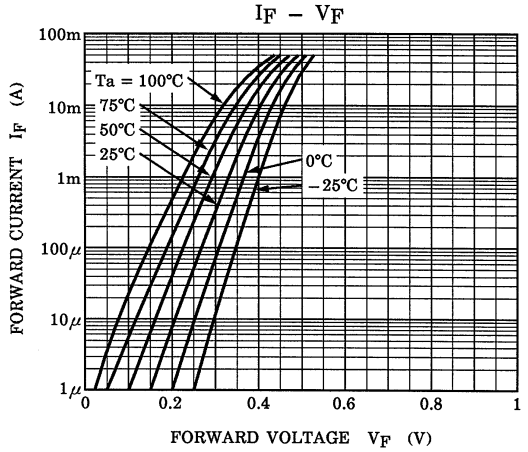
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_{F\ (1)}$	—	I_F = 1mA	—	0.33	—	V
	$V_{F\ (2)}$	—	I_F = 5mA	—	0.38	—	
	$V_{F\ (3)}$	—	I_F = 50mA	—	0.50	0.55	
Reverse current	I_R	—	V_R = 20V	—	—	0.5	μA
Total capacitance	C_T	—	V_R = 0, f = 1MH$_Z$	—	3.9	—	pF

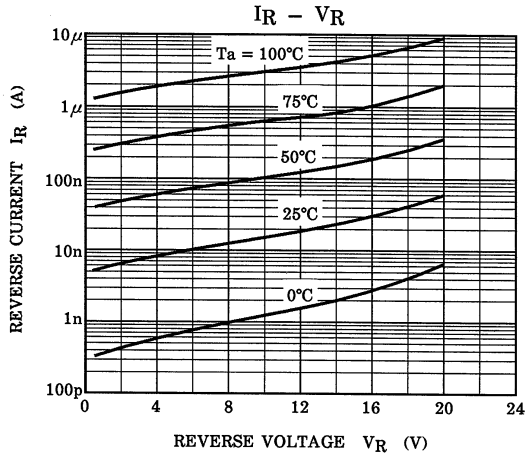
Pin Assignment (Top View)

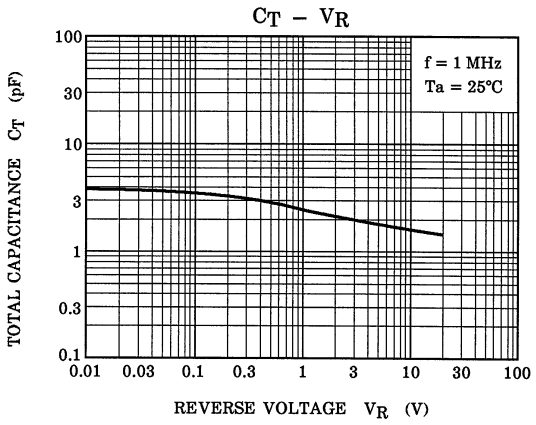


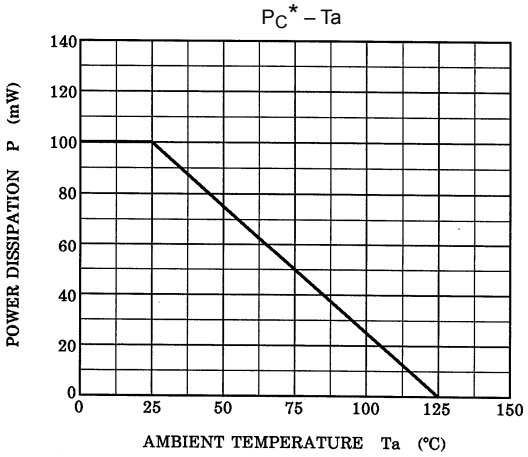
Marking











*: Total Rating

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