

TOSHIBA Diode Silicon Epitaxial Planar Type

HN2D03F

High Speed Switching Application

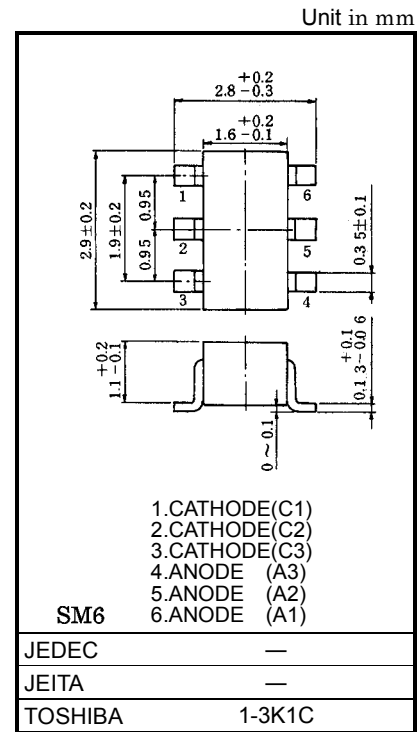
- Small package
- Low forward voltage : $V_F(2) = 0.94V$ (typ.)
- Small total capacitance : $C_T = 2.5pF$ (typ.)

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	420	V
Reverse voltage	V_R	400	V
Maximum (peak) forward current	I_{FM}	300*	mA
Average forward current	I_O	100*	mA
Surge current (10ms)	I_{FSM}	2*	A
Power dissipation	P	300**	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55~150	$^\circ C$

*: Maximum Ratings per each one of Q1,Q2 or Q3. In case of simultaneous use, the Maximum Ratings per diode shall be derated to 75%.

** :Total rating

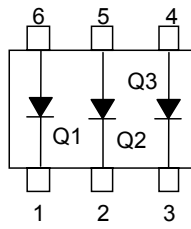


Weight: 0.015mg(typ.)

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

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 10mA$	—	0.8	—	V
	$V_F(2)$	—	$I_F = 100mA$	—	1.0	1.3	
Reverse current	$I_R(1)$	—	$V_R = 300V$	—	—	0.1	μA
	$I_R(2)$	—	$V_R = 400V$	—	—	1.0	
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	2.5	5.0	pF
Reverse recovery time	t_{rr}	—	$I_F = 10mA$ (fig.1)	—	0.5	—	us

Pin Assignment (Top View)



Marking

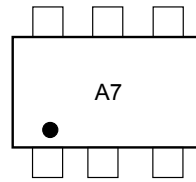
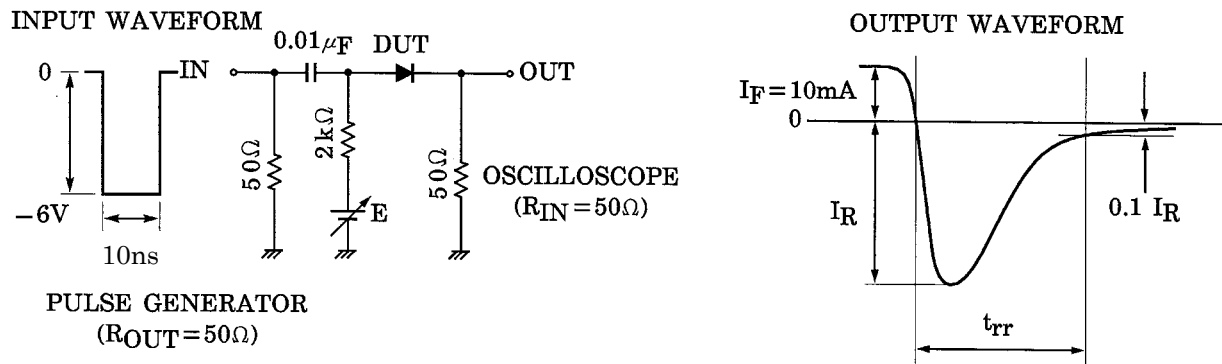
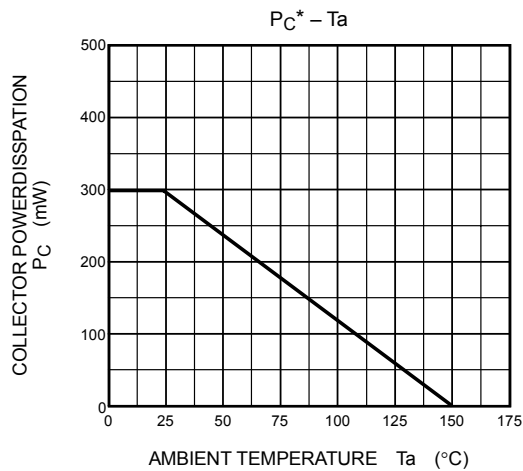
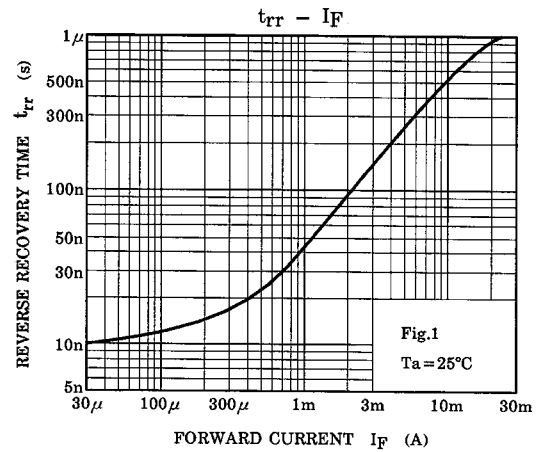
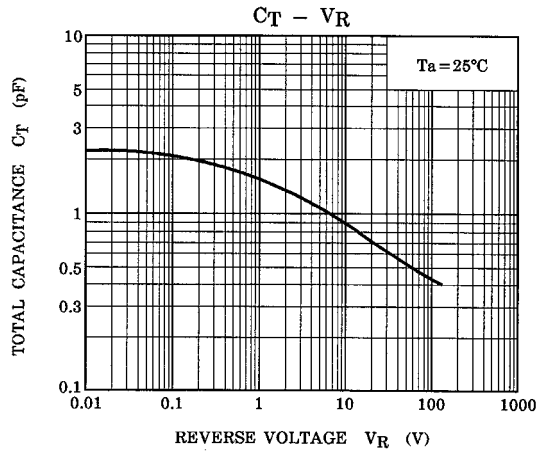
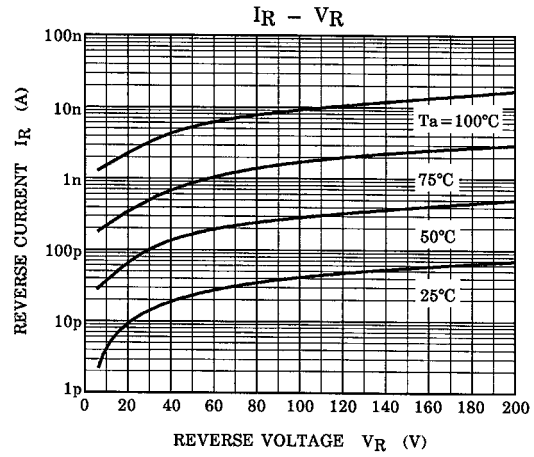
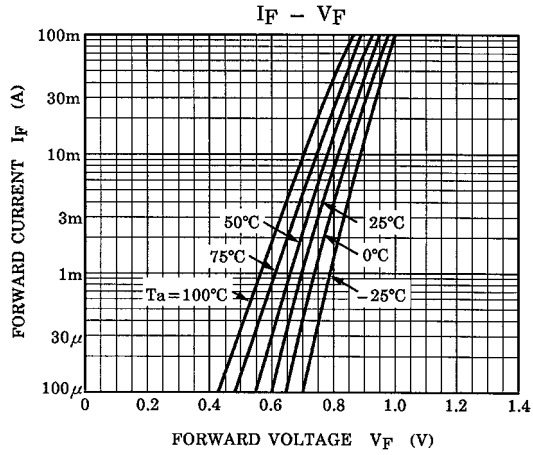


Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit





*Total Rating.

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