

HN1D01FE

Ultra High Speed Switching Application

- HN1D02FU is composed of 2 unit of cathode common.
- Low forward voltage : $V_{F(3)} = 0.92V$ (typ.)
- Fast reverse recovery time : $t_{rr} = 1.6ns$ (typ.)
- Small total capacitance : $C_T = 2.2pF$ (typ.)

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	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	100**	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~150	°C

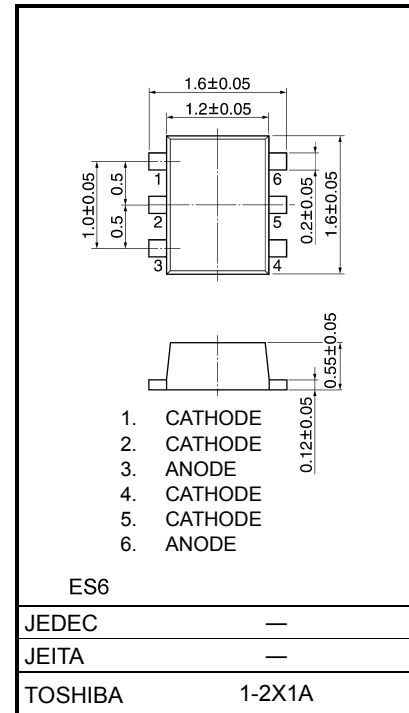
*: These are the Maximum Ratings for a single diode (Q1, Q2, Q3 or Q4).
Where Unit 1 and Unit 2 are used independently or simultaneously, the Maximum Ratings per diode are 75% of those for a single diode.

** : Total rating.

Electrical Characteristics (Q1, Q2, Q3, Q4 Common; Ta = 25°C)

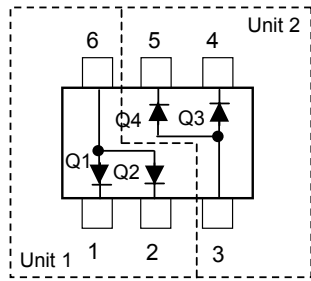
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_{F(1)}$	—	$I_F = 1mA$	—	0.61	—	V
	$V_{F(2)}$	—	$I_F = 10mA$	—	0.74	—	
	$V_{F(3)}$	—	$I_F = 100mA$	—	0.92	1.20	
Reverse current	$I_R(1)$	—	$V_R = 30V$	—	—	0.1	μA
	$I_R(2)$	—	$V_R = 80V$	—	—	0.5	
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	2.2	—	pF
Reverse recovery time	t_{rr}	—	$I_F = 10mA$ (fig.1)	—	1.6	—	ns

Unit in mm



Weight: 0.003g (typ.)

Pin Assignment (Top View)



Marking

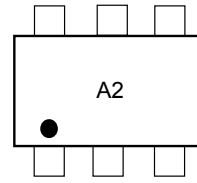
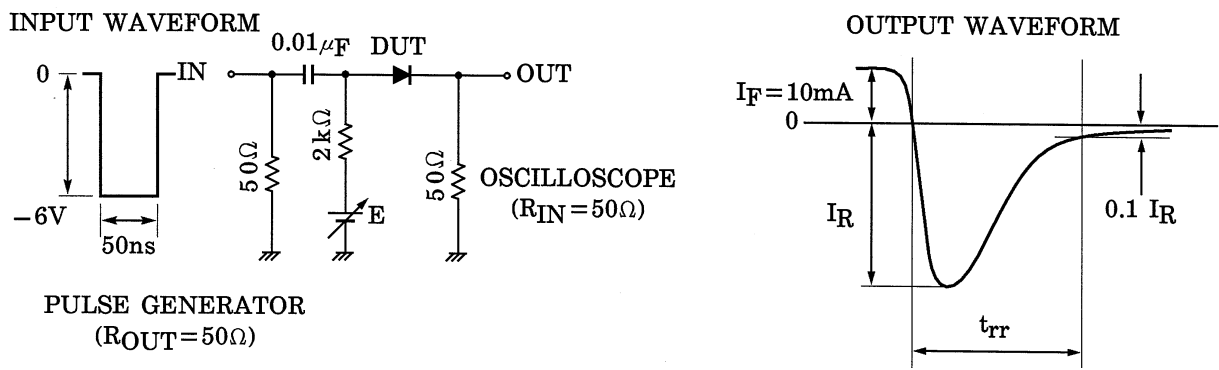
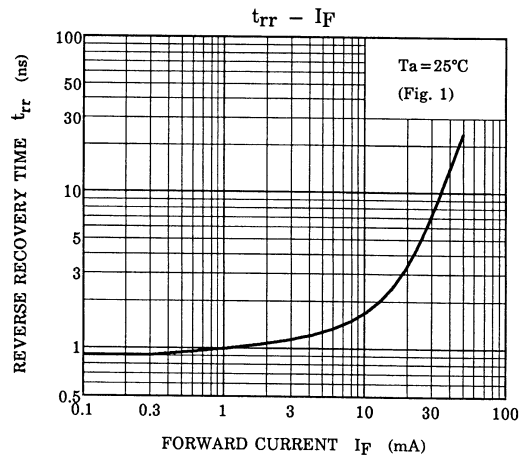
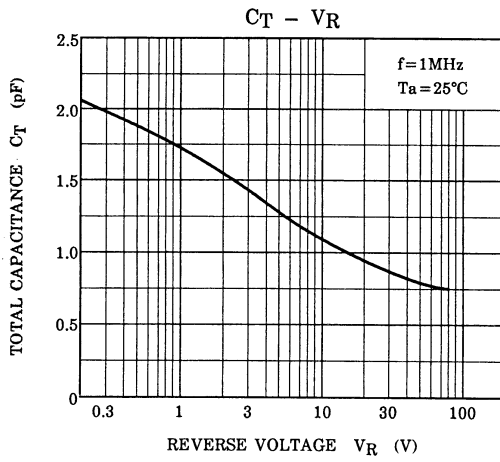
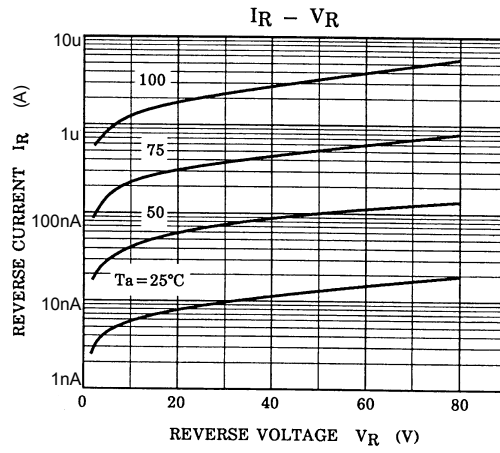
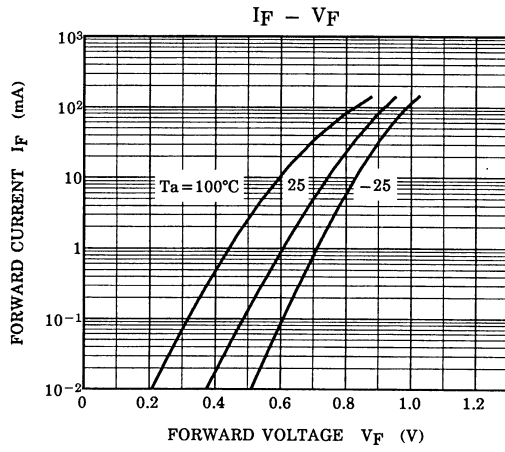


Fig. 1 Reverse Recovery Time (t_{rr}) Test Circuit





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