TOSHIBA 1NH42

## TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

# 1 N H 4 2

#### SWITCHING TYPE POWER SUPPLY APPLICATIONS.

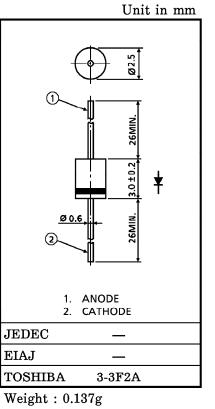
• Repetitive Peak Reverse Voltage : V<sub>RRM</sub>=1000V

• Average Forward Current : I<sub>F(AV)</sub>=1.0A

ullet Very Fast Reverse-Recovery Time :  $t_{rr} = 400$ ns (Max.)

#### **MAXIMUM RATINGS** (Ta = 25°C)

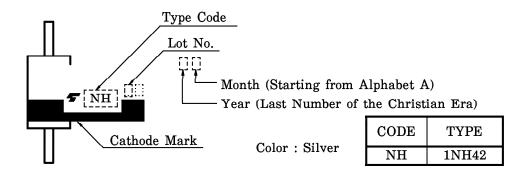
CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	$v_{RRM}$	1000	V	
Average Forward Current (Ta=25°C)	I <sub>F (AV)</sub>	1.0	A	
Peak One Cycle Surge Forward	Incre	30 (50Hz)	A	
Current (Non-Repetitive)	IFSM	33 (60Hz)		
Junction Temperature Range	$T_{ m j}$	-40~150	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~150	°C	



### **ELECTRICAL CHARACTERISTICS** (Ta = 25°C)

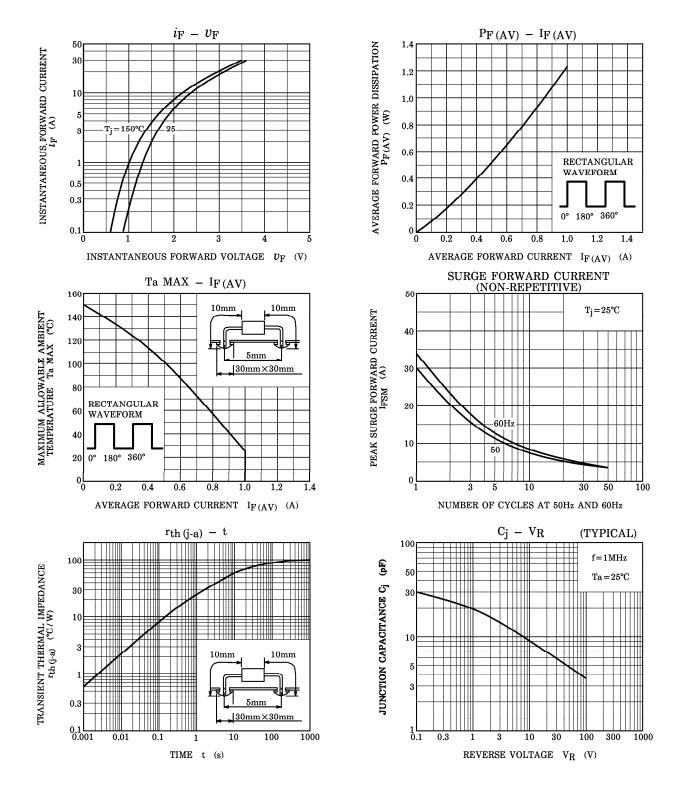
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{ extbf{FM}}$	$I_{\text{FM}} = 1.0 A$	_	_	1.3	V
Repetitive Peak Reverse Current	$I_{ m RRM}$	$V_{RRM} = 1000V$	_	_	10	$\mu$ <b>A</b>
Reverse Recovery Time	$t_{rr}$	$I_F=1A$ , di/dt=-30A/ $\mu$ s	_	_	400	ns
Forward Recovery Time	$\mathfrak{t}_{\mathrm{fr}}$	$I_{\mathbf{F}} = 1.0 A$	_	_	850	ns
Thermal Resistance	$ m R_{th(j-a)}$	Junction to Ambient	_	_	98	°C/W

### **MARK**



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