

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

TFR7H

STROBO FLASHER APPLICATIONS (FAST RECOVERY)

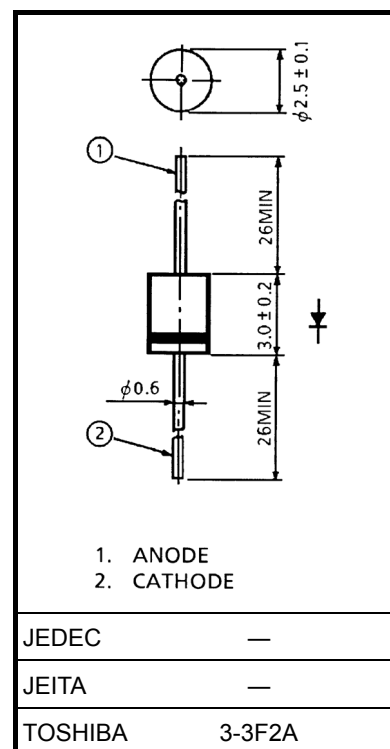
Unit: mm

- Average Forward Current: $I_F (AV) = 0.2A$
- Reverse Voltage (DC): $V_{RM} = 500V$
- Repetitive Peak Reverse Surge Voltage: $V_{RRSM} = 1500V$
- Reverse Recovery Time: $t_{rr} = 10\mu s$

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage (DC)	V_{RM}	500	V
Repetitive Peak Reverse Surge Voltage	V_{RRSM}	1500	V
Average Forward Current	$I_F (AV)$	0.2	A
Peak One Cycle Surge Forward Current (Non Repetitive)	I_{FSM}	10	A
Junction Temperature	T_j	-40~125	$^\circ C$
Storage Temperature Range	T_{stg}	-40~125	$^\circ C$

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings. Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

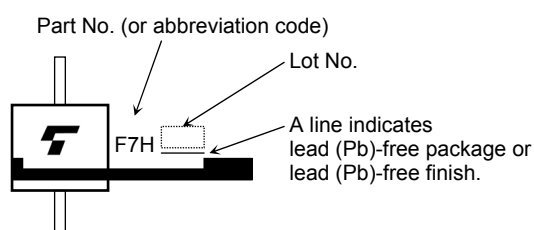


Weight: 0.137 g (typ.)

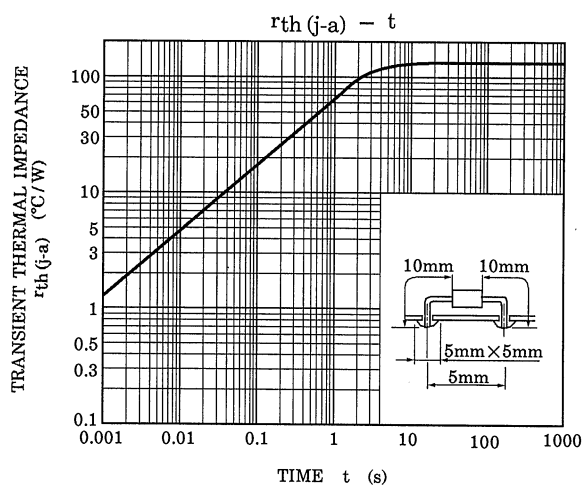
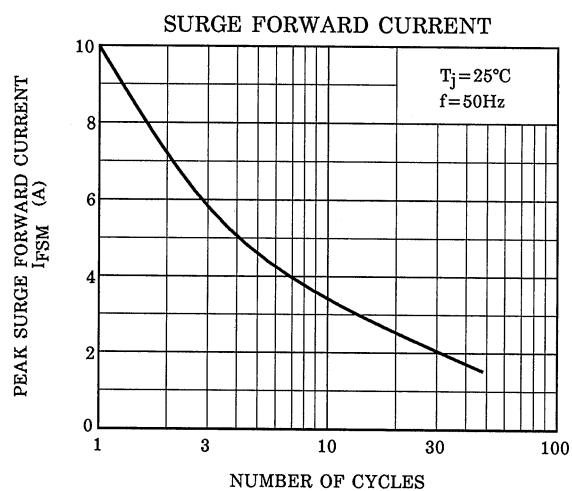
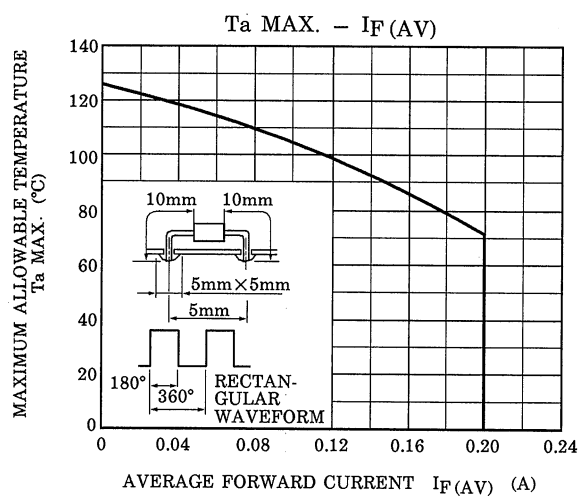
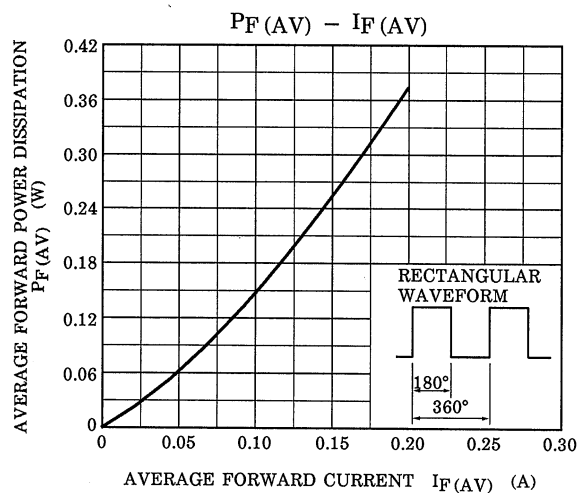
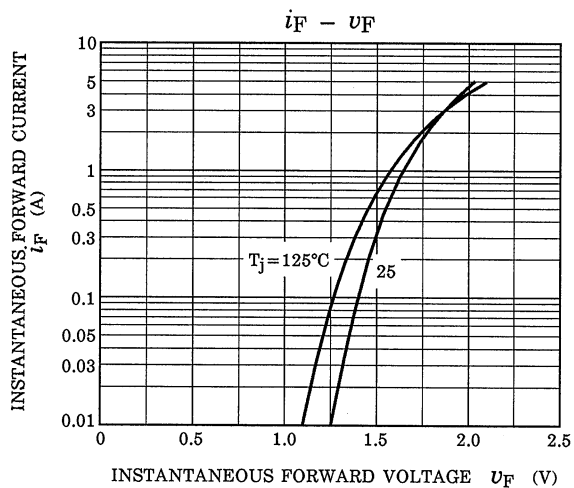
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 0.3A$	—	—	1.50	V
Reverse Current	I_{RM}	$V_{RM} = 500V$	—	—	10	μA
Repetitive Peak Reverse Surge Current	I_{RRSM}	$V_{RRSM} = 1500V$	—	100	—	μA
Reverse Recovery Time	t_{rr}	$I_F = 20mA, I_R = 1mA$	—	—	10	μs

MARKING



Abbreviation Code	Part No.
F7H	TFR7H



RESTRICTIONS ON PRODUCT USE

20070701-EN

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- TOSHIBA is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or damage to property.
In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent TOSHIBA products specifications. Also, please keep in mind the precautions and conditions set forth in the "Handling Guide for Semiconductor Devices," or "TOSHIBA Semiconductor Reliability Handbook" etc.
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