TOSHIBA RECTIFIER SILICON DIFFUSED TYPE

S5566B,S5566G,S5566J,S5566N

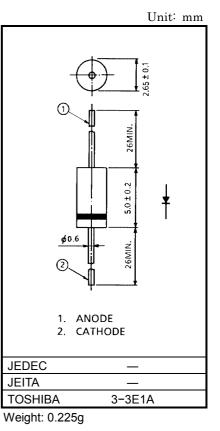
GENERAL PURPOSE RECTIFIER APPLICATIONS

• Average Forward Current $: I_F(AV) = 1A$

• Repetitive Peak Reverse Voltage : V_{RRM} = 100, 400, 600, 1000V

MAXIMUM RATINGS (Ta = 25°C)

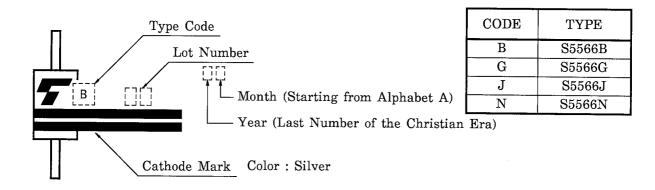
CHARACTERISTIC		SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	S5566B		100	V	
	S5566G	V _{RRM}	400		
	S5566J	VRRM	600		
	S5566N		1000		
Average Forward Current		I _{F (AV)}	1.0	А	
Peak One Cycle Surge Forward Current (Non Repetitive)	S5566B S5566G	IFSM	45 (50Hz)	A	
			49 (60Hz)		
	S5566J S5566N		30 (50Hz)		
			33 (60Hz)		
Junction Temperature		Тj	-40~150	°C	
Storage Temperature Range		T _{stg}	-40~150	°C	



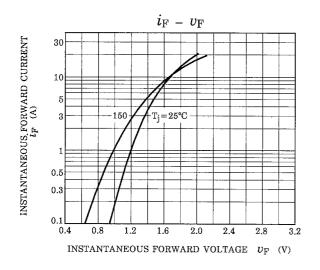
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

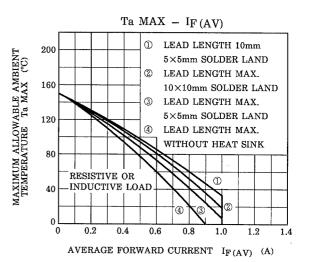
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage	V _{FM}	I _{FM} = 1.0A		_	1.2	V
Repetitive Peak Reverse Current	I _{RRM}	V _{RRM} = Rated			10	μA

MARKING



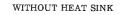
TOSHIBA





rth (j-a) - t 10000 TRANSIENT THERMAL IMPEDANCE rth (j-a) (°C/W) 1000 100 10 1# 1 0.1 0.001 0.01 0.1 10 100 1000 TIME t (s)

> NOTE : rth MEASUREMENT CONDITION • MAXIMUM LEAD LENGTH MAX.



SURGE FORWARD CURRENT (NON-REPETITIVE) 50 Ð $T_j = 25^{\circ}C$ SURGE FORWARD CURRENT IFSM 4(60Hz 30 S5566B 20 S5566G 10 S5566J 50Hz S5566N 0L 1 3 10 30 100 NUMBER OF CYCLES AT 50Hz AND 60Hz

RESTRICTIONS ON PRODUCT USE

- 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..
- The TOSHIBA products listed in this document are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.). These TOSHIBA products are neither intended nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury ("Unintended Usage"). Unintended Usage include atomic energy control instruments, airplane or spaceship instruments, transportation instruments, traffic signal instruments, combustion control instruments, medical instruments, all types of safety devices, etc.. Unintended Usage of TOSHIBA products listed in this document shall be made at the customer's own risk.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.