TOSHIBA SCHOTTKY BARRIER RECTIFIER STACK SCHOTTKY BARRIER TYPE

# 5 G W J 2 C Z 4 7 C

SWITCHING TYPE POWER SUPPLY APPLICATION CONVERTER & CHOPPER APPLICATION

• Repetitive Peak Reverse Voltage : VRRM=40V

• Average Output Rectified Current : IO=5A

• Low Switching Losses and Output Noise.

# **MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	$v_{RRM}$	40	V	
Repetitive Peak Reverse Surge Voltage (Note 1)	$v_{RRSM}$	48	V	
Average Output Rectified Current	IO	5	Α	
Peak One Cycle Surge Forward	$I_{FSM}$	50 (50Hz)	A	
Current (Sin Wave)		55 (60Hz)		
Junction Temperature	$T_{ m j}$	-40~125	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~150	°C	
Screw Torque	_	0.6	N∙m	

Note 1 : Pulse Width (t\_w)  $\leq 500 ns$ , duty (t\_w/T)  $\leq 1/25$ 

# Unit in mm 10.3MAX. Ø3.2±0.2 0.75±0.15 1.1 1.1 NIWO E 1.3 2 2.54±0.25 1. ANODE 2. ANODE 3. CATHODE JEDEC JEDEC JEDEC

TOSHIBA 12-10C1A Weight: 2.0g

**EIAJ** 

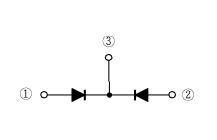
### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

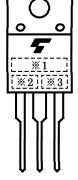
		, organ	-··v <sub>B</sub>		
CHARACTERISTIC	SYMBOL	TEST CONDITION	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 2)	$V_{ extbf{FM}}$	$I_{\text{FM}} = 2.5 \text{A}$	-	0.55	V
Repetitive Peak Reverse Current (Note 2)	$I_{ m RRM}$	V <sub>RRM</sub> =Rated	_	3.5	mA
Junction Capacitance (Note 2)	$\mathbf{C_{j}}$	$V_R$ =10V, f=1.0MHz	100	_	рF
Thermal Resistance	$ m R_{th~(j-c)}$	DC Total, Junction to Case	_	3.5	°C/W

Note 2: A value of one cell.

# **POLARITY**

# **MARKING**

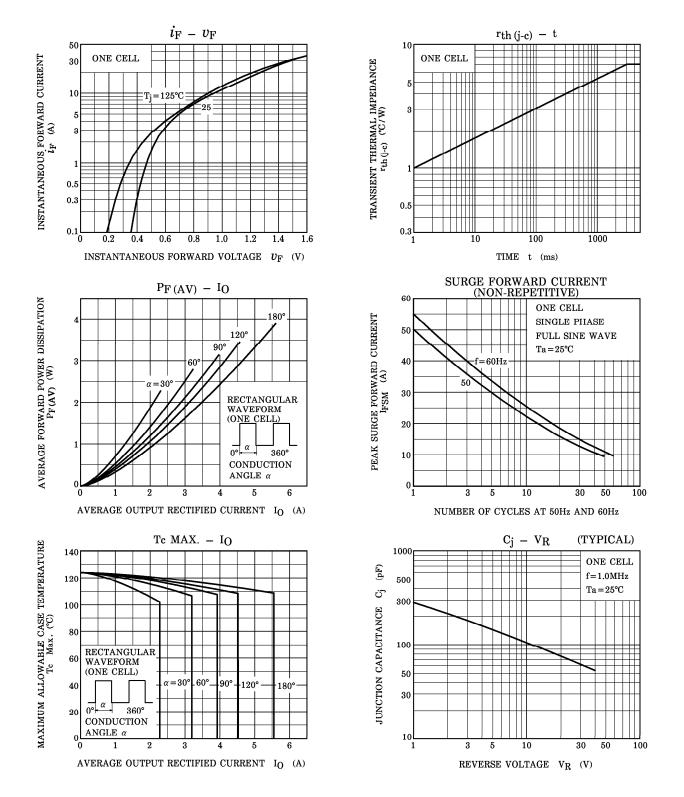




<b>%1</b>	MARK	5GWJ2CZ	TYPE	5GWJ2CZ47C			
<b>*2</b>	C						
<b>*3</b>	Lot Number  Month (Starting from Alphabet A)  Year (Last Number of the Christian Era)						

961001EAA2

TOSHIBA is continually working to improve the quality and the 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 observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product 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 products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.



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.

