## TOSHIBA SUPER FAST RECOVERY DIODE SILICON EPITAXIAL TYPE

## 5 J U Z 4 7

# SWITCHING TYPE POWER SUPPLY APPLICATION CONVERTER & CHOPPER APPLICATION

• Repetitive Peak Reverse Voltage : VRRM=600V

• Average Output Rectified Current : IO=5A

• Ultra Fast Reverse-Recovery Time: trr=100ns

• Low Switching Losses and Low Output Noise.

## **MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$v_{RRM}$	600	V
Average Output Rectified Current	$I_{O}$	5	A
Peak One Cycle Surge Forward	Taga	50 (50Hz)	
Current (Non-Repetitive)	IFSM	60 (60Hz)	Α
Junction Temperature	$T_{j}$	-40~150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~150	$^{\circ}\mathrm{C}$

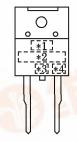
# Unit in mm 10.3MAX 93.2 ± 0.2 1. CATHODE 2. ANODE JEDEC EIAJ TOSHIBA 12-10C2

Weight: 2.0g

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Peak Forward Voltage	$v_{FM}$	I <sub>FM</sub> =5A	_	1.5	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM} = 600V$	_	100	$\mu$ <b>A</b>
Reverse Recovery Time	$ m t_{rr}$	$I_F=2A$ , di/dt= $-20A/\mu s$	_	100	ns
Forward Recovery Time	${ m t_{fr}}$	$I_{\mathbf{F}} = 1A$	_	200	ns
Thermal Resistance	R <sub>th (j-c)</sub>	DC	_	4.0	°C/W

## **MARKING**

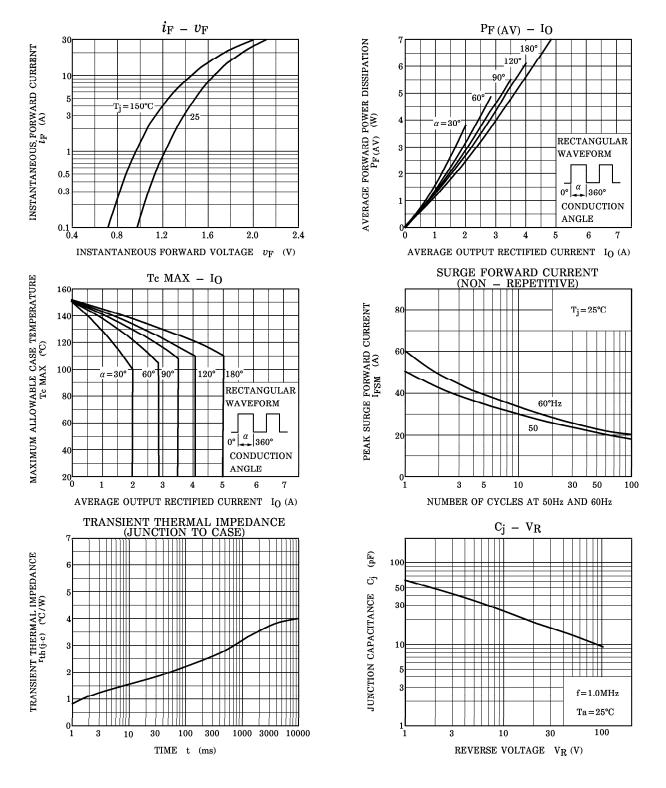


1	th (j-c)	DC		_	4.0	C7 W	
						DZSC.GOM	
*NUMBE	R	SYMBOL	L MARK				
*1	Tosh	iba Produ <mark>ct Mar</mark> k		7			
*2	Туре	e Code		5JUZ47			
*3	Pola	rity Mark		<b>─</b>			
*4	Lot Number  *4						

### 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 perature 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.

**TOSHIBA 5JUZ47** 



961001EAA2'

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.