TOSHIBA SCHOTTKY BARRIER RECTIFIER STACK SCHOTTKY BARRIER TYPE

# 16FWJ2C42

### HIGH SPEED RECTIFIER APPLICATIONS

Repetitive Peak Reverse Voltage : VRRM=30V, 40V

• Average Output Rectified Current: IO=16A

• Low Peak Forward Voltage : V<sub>FM</sub>=0.55V

### **MAXIMUM RATINGS**

CHARACTERIS	SYMBOL	RATING	UNIT		
Repetitive Peak 16FWJ2C42		Vanas	30	V	
Reverse Voltage	16GWJ2C42	$V_{ m RRM}$	40	<b>v</b>	
Average Output Rectification (Tc=110°C)	IO	16	A		
Peak One Cycle Surge	$I_{FSM}$	160 (50Hz)	A		
Current (Sin Wave, Ta		192 (60Hz)			
Junction Temperature	$T_{j}$	-40~125	°C		
Storage Temperature R	$T_{ m stg}$	-40~150	°C		
Screw Torque	-	0.8	N∙m		

# 

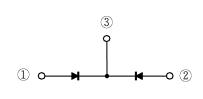
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

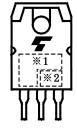
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	$v_{FM}$	$I_{\text{FM}} = 8.0 \text{A}$	_	_	0.55	V
Repetitive Peak Reverse Current (Note 1)	$I_{RRM}$	V <sub>RRM</sub> =Rated	_	_	15	mA
Junction Capacitance (Note 1)	$C_{j}$	$V_R = 10V, f = 1.0MHz$	360	_	_	рF
Thermal Resistance	R <sub>th (j-c)</sub>	DC Total, Junction to Case	_	_	1.2	°C/W

(Note 1) A value of one cell.

### **POLARITY**

# MARKING



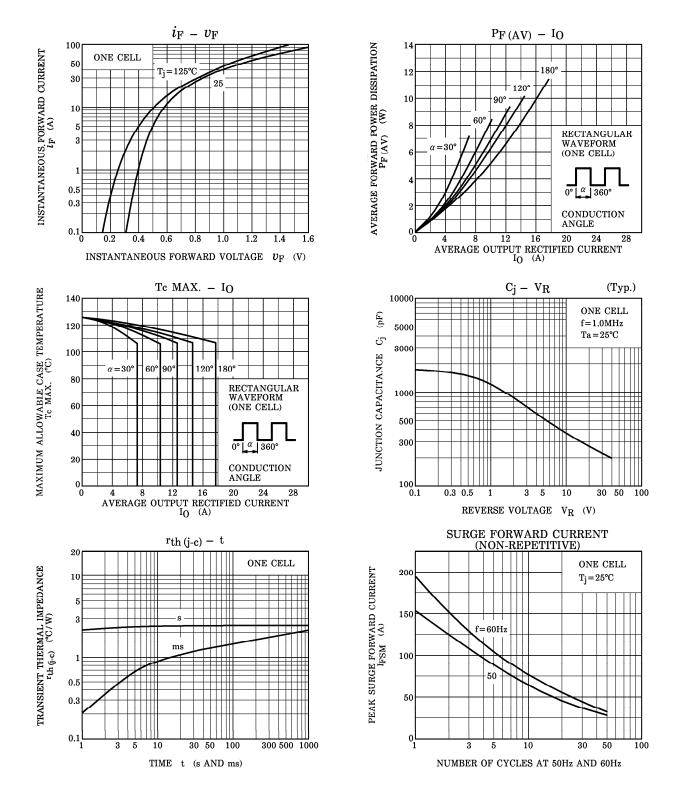


ı	<b>%1</b>	TYPE	16FWJ2C42, 16GWJ2C42
	<b>*2</b>	Lot Nur	mber  — Month (Starting from Alphabet A)  — Year (Last Number of the Christian Era)

Weight: 4.85g

961001EAA2

<sup>●</sup> 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.

