

TOSHIBA SCHOTTKY BARRIER RECTIFIER STACK SCHOTTKY BARRIER TYPE

10FWJ2C42

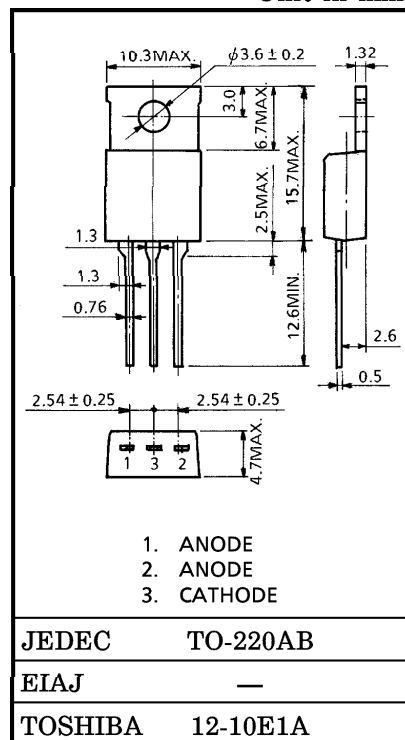
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Average Output Rectified Current : $I_O = 10A$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 30V$
- Low Forward Voltage : $V_{FM} = 0.55V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Average Output Rectified Current ($T_c = 107^\circ C$)	I_O	10	A
Peak One Cycle Surge Forward Current	I_{FSM}	100	A
Junction Temperature	T_j	-40~125	$^\circ C$
Storage Temperature Range	T_{stg}	-40~150	$^\circ C$

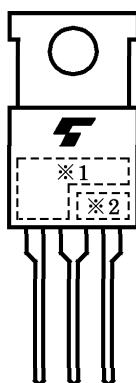
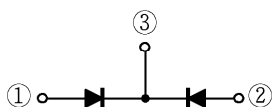


ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 5.0A$	—	—	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = \text{Ratings Voltage}$	—	—	3.5	mA
Reverse Recovery Time	t_{rr}	$I_{FM} = 1.0A, di/dt = -50A/\mu s$	—	—	35	ns
Junction Capacitance	C_j	$V_R = 10V, f = 1.0MHz$	235	—	—	pF
Thermal Resistance	$R_{th(j-c)}$	DC Total, Junction to Case	—	—	2.5	$^\circ C/W$

POLARITY

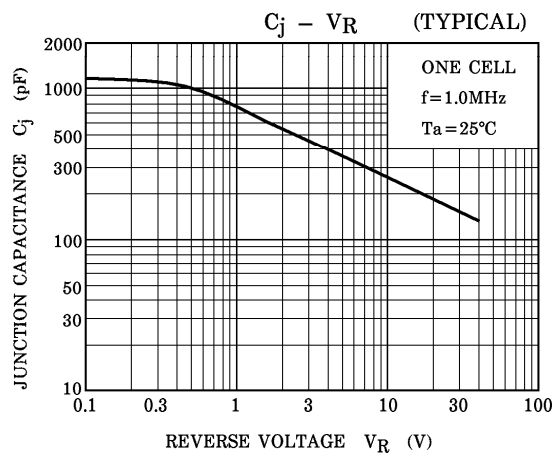
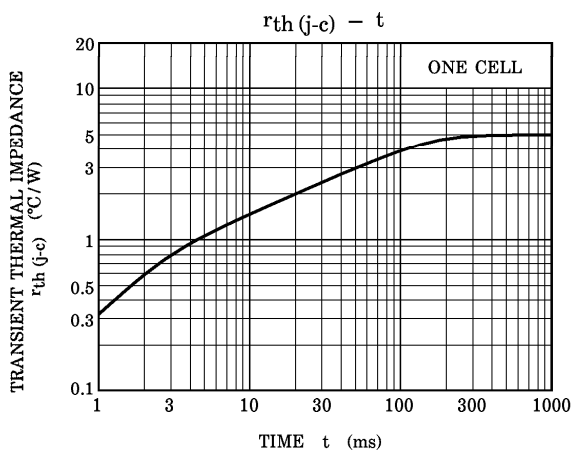
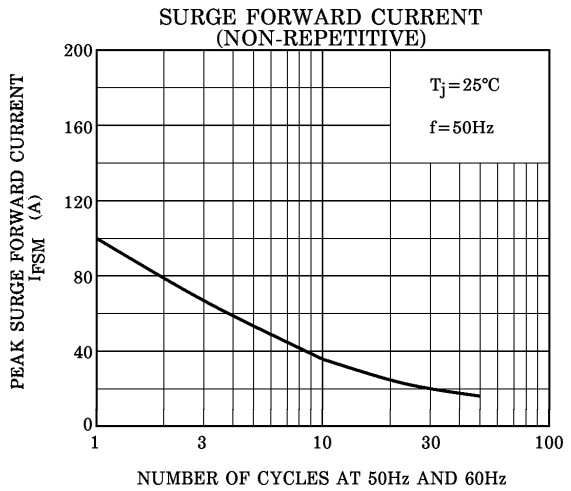
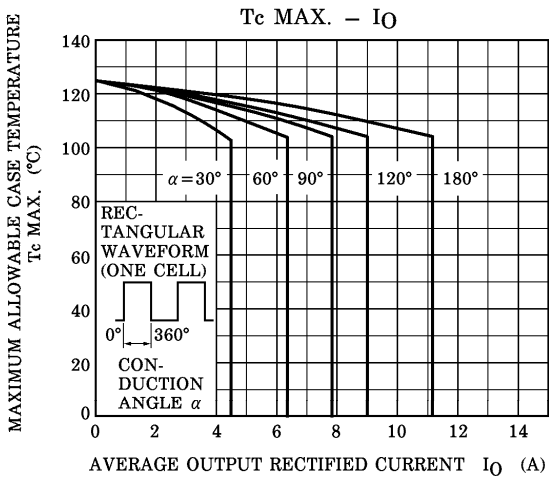
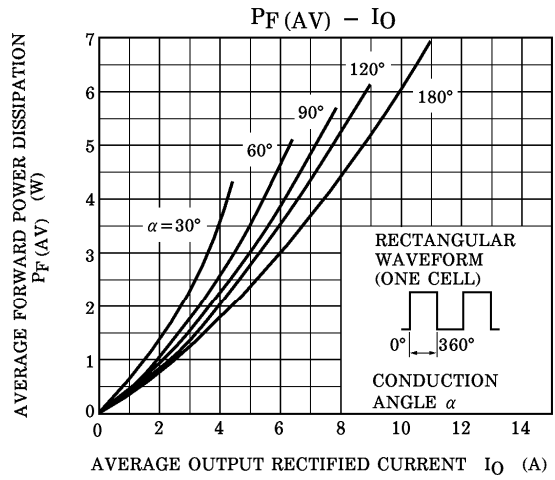
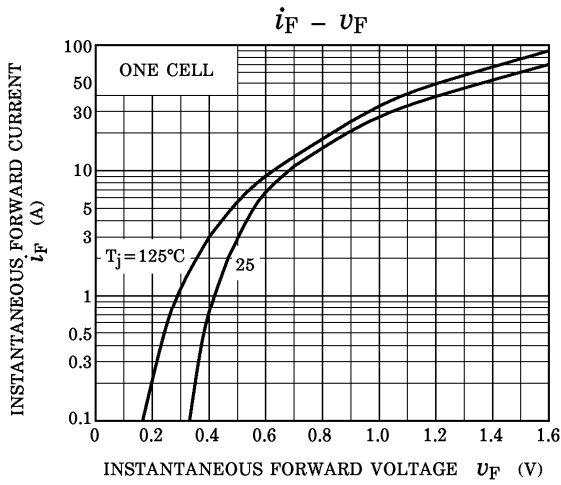
MARKING



*1	MARK	10FWJ2C42
*2	Lot Number	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="margin-right: 5px;">—</div> <div>Month (Starting from Alphabet A)</div> </div> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></div> <div style="margin-right: 5px;">—</div> <div>Year (Last Number of the Christian Era)</div> </div>

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.



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.