

TOSHIBA ALLOY-FREE RECTIFIER

1600EXD25, 1600FXD25

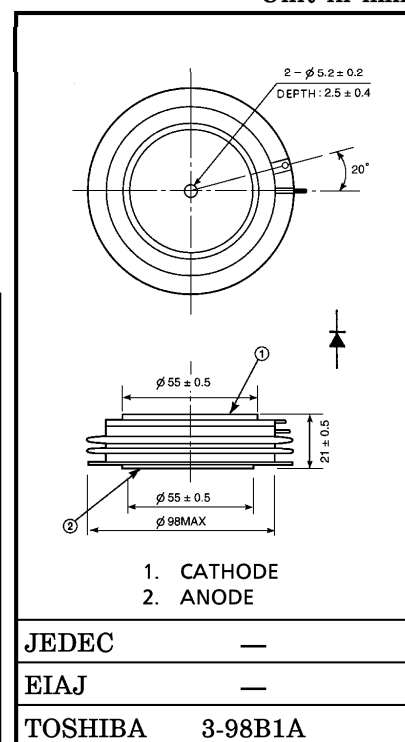
RECTIFIER APPLICATIONS

- Repetitive Peak Reverse Voltage : $V_{RRM} = 2500 \sim 3000V$
- Average Forward Current : $I_F (AV) = 1600A$
- Flat Package

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	1600EXD25	V_{RRM}	2500	V
	1600FXD25		3000	
Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5ms$, $T_j = 0 \sim 150^\circ C$)	1600EXD25	V_{RSM}	2750	V
	1600FXD25		3300	
Average Forward Current		$I_F (AV)$	1600	A
Peak One Cycle Surge Forward Current (Non-Repetitive)		I_{FSM}	25000 (50Hz) 28000 (60Hz)	A
Junction Temperature Range		T_j	$-40 \sim 150$	$^\circ C$
Storage Temperature Range		T_{stg}	$-40 \sim 150$	$^\circ C$
Screw Torque		—	19.6 ± 2	kN

Unit in mm



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = \text{Rating voltage, } T_j = 150^\circ C$	—	50	mA
Peak Forward Voltage	V_{FM}	$I_{FM} = 2500A, T_j = 25^\circ C$	—	1.40	V
Thermal Resistance (Junction to Case)	$R_{th(j-f)}$	DC	—	0.02	$^\circ C / W$

961001EAA1

- 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.

