

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

# 500EXH22

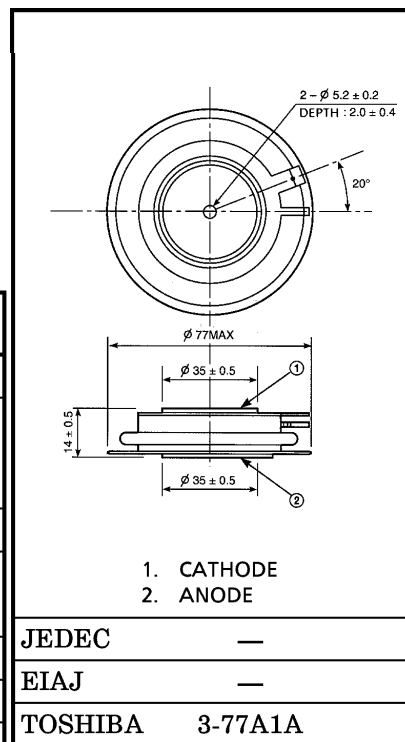
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage :  $V_{RRM}=2500V$
- Average Forward Current :  $I_F(AV)=500A$
- Reverse Recovery Time :  $t_{rr}=5\mu s$  (MAX.) ( $T_j=25^\circ C$ )

**MAXIMUM RATINGS**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	2500	V
Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5ms$ , $T_j=0\sim 125^\circ C$ )	$V_{RSM}$	2600	V
Average Forward Current	$I_F(AV)$	500	A
Peak One Cycle Surge Forward Current	$I_{FSM}$	10000 (50Hz) 11000 (60Hz)	A
Junction Temperature Range	$T_j$	-40~125	$^\circ C$
Storage Temperature Range	$T_{stg}$	-40~125	$^\circ C$
Mounting Force	—	$14.7 \pm 1.5$	kN



Weight : 220g

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT	
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM}=2500V, T_j=125^\circ C$	—	100	mA	
Peak Forward Voltage	$V_{FM}$	$I_{FM}=1500A, T_j=25^\circ C$	—	2.0	V	
Reverse Recovery Time	$t_{rr}$	$I_F=500A$ $di_F/dt=100A/\mu s$	$T_j=25^\circ C$	—	5.0	$\mu s$
			$T_j=125^\circ C$	—	6.0	
Thermal Resistance (Junction to Fin)	$R_{th(j-f)}$	DC	—	0.04	$^\circ C/W$	

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