

TENTATIVE

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

1500JXH22

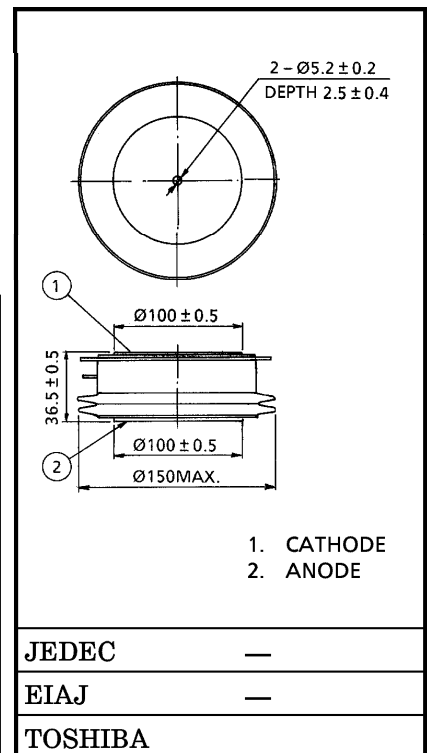
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 6000\text{ V}$
- Average Forward Current : $I_F(AV) = 1500\text{ A}$
- Double Side Cooling

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	6000	V
Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5\text{ ms}$, $T_j \leq 0\sim 125^\circ\text{C}$)	V_{RSM}	6300	V
Average Forward Current	$I_F(AV)$	1500	A
Peak One Cycle Surge Forward Current (Non-Repetitive, 10 ms Width Half Sine Waveform)	I_{FSM}	25000	A
Junction Temperature Range	T_j	$-40\sim 125$	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-40\sim 150$	$^\circ\text{C}$
Mounting Force	—	70~100	kN



Weight : 3000 g

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 6000\text{ V}$, $T_j = 125^\circ\text{C}$	—	—	150	mA
Peak Forward Voltage	V_{FM}	$I_{FM} = 4500\text{ A}$, $T_j = 125^\circ\text{C}$	—	—	5.5	V
Reverse Recovery Charge	Q_{rr}	$I_F = 1500\text{ A}$, $T_j = 125^\circ\text{C}$ $di_F/dt = 100\text{ A}/\mu\text{s}$	—	—	3150	μC
Thermal Resistance	$R_{th(j-f)}$	DC	—	—	0.0075	$^\circ\text{C}/\text{W}$

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