

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

300EXH22

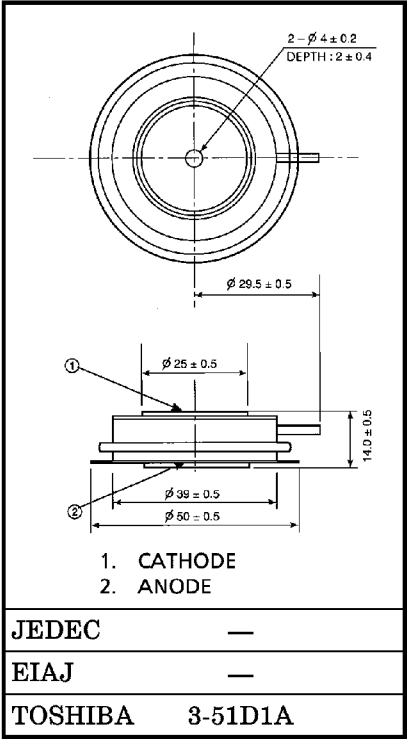
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}=2500V$
- Average Forward Current : $I_F(AV)=300A$
- 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	$I_F(AV)$	300	A
Peak One Cycle Surge Forward Current	I_{FSM}	6000 (50Hz) 6600 (60Hz)	A
Junction Temperature Range	T_j	$-40\sim 125$	$^{\circ}C$
Storage Temperature Range	T_{stg}	$-40\sim 125$	$^{\circ}C$
Mounting Force	—	10.8 ± 1.0	kN



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	MAX.	UNIT
Repetitive Peak Reverse Current	I _{RRM}	V _{RRM} =2500V, T _j =125°C		—	50	mA
Peak Forward Voltage	V _{RM}	I _{FM} =1000A, T _j =25°C		—	1.75	V
Reverse Recovery Time	t _{rr}	I _F =300A	T _j =25°C	—	5.0	μs
		di _F / dt=50A / μs	T _j =125°C	—	7.0	
Thermal Resistance (Junction to Fin)	R _{th} (j-f)	DC		—	0.05	°C / W

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