

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

200FXG13, 200FXH13

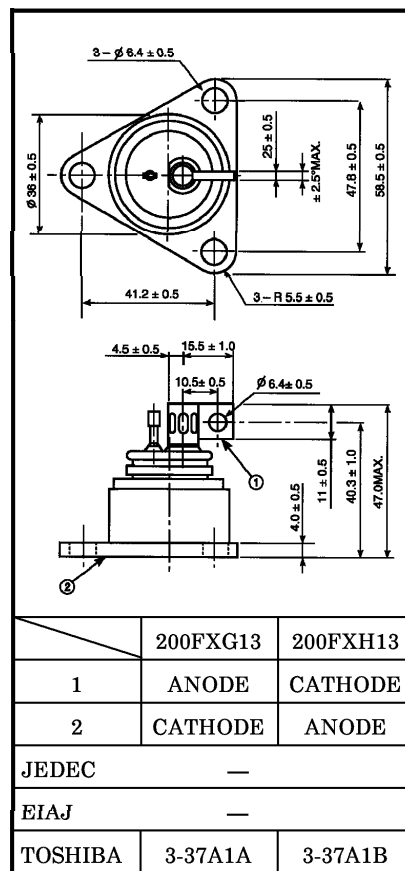
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}=3000V$
- Average Forward Current : $I_F(AV)=200A$
- Reverse Recovery Time ($T_j=25^{\circ}C$) : $t_{rr}=4.5\mu s$

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	3000	V
Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5ms$, $T_j=0\sim 125^{\circ}C$)	V_{RSM}	3100	V
Average Forward Current	$I_F(AV)$	200	A
Peak One Cycle Surge Forward Current	I_{FSM}	4000 (50Hz) 4400 (60Hz)	A
Junction Temperature Range	T_j	-40~125	$^{\circ}C$
Storage Temperature Range	T_{stg}	-40~125	$^{\circ}C$
Screw Torque	—	1.6	N·m



Weight : 200g

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT	
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=3000V, T_j=125^{\circ}C$	—	40	mA	
Peak Forward Voltage	V_{FM}	$I_{FM}=630A (T_j=25^{\circ}C)$	—	1.8	V	
Reverse Recovery Time	t_{rr}	$I_F=200A$ $di_F/dt=100A/\mu s$	$T_j=25^{\circ}C$	—	4.5	μs
			$T_j=125^{\circ}C$	—	5.5	
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	—	0.16	$^{\circ}C/W$	

Note : Contact thermal resistance $R_{th(c-f)}=0.04^{\circ}C/W$ (Applied silicone grease)

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