

TOSHIBA

50FXFG13, 50FXFH13

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

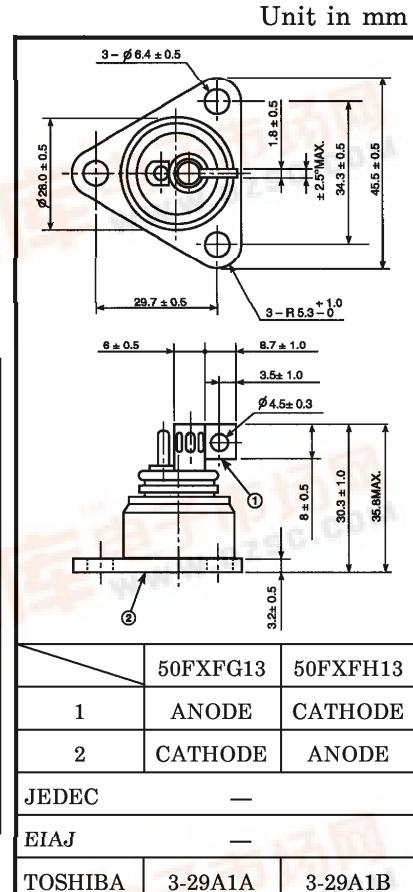
50FXFG13, 50FXFH13

HIGH SPEED RECTIFIER APPLICATIONS

- Repetitive Peak Reverse Voltage : $V_{RRM} = 3300V$
- Average Forward Current : $I_F(AV) = 50A$
- Reverse Recovery Time ($T_j = 25^\circ C$) : $t_{rr} = 2.0 \mu s$

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	3300	V
Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5ms$, $T_j = 0 \sim 125^\circ C$)	V_{RSM}	3400	V
Average Forward Current	$I_F(AV)$	50	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	1000 (50Hz) 1100 (60Hz)	A
Junction Temperature Range	T_j	-40 ~ 125	°C
Storage Temperature Range	T_{stg}	-40 ~ 125	°C
Screw Torque	—	1.6	N·m



Weight : 100g

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	MAX.	UNIT
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 3300V, T_j = 125^\circ C$	—	50	mA
Peak Forward Voltage	V_{FM}	$I_{FM} = 150A (T_j = 25^\circ C)$	—	1.7	V
Reverse Recovery Time	t_{rr}	$I_F = 50A$ $dI_F/dt = 100A/\mu s$	$T_j = 25^\circ C$ $T_j = 125^\circ C$	2.0 2.5	μs
Thermal Resistance	$R_{th(j-c)}$	Junction to Fin	—	0.26	°C / W

Note : Contact thermal resistance $R_{th(c-f)} = 0.07^\circ C / W$ (Applied silicone grease)

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