

TOSHIBA RECTIFIER SILICON DIFFUSED TYPE

1R5JU41

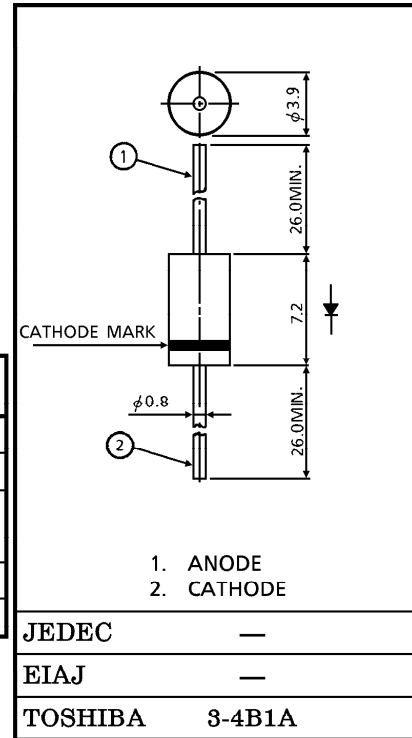
HIGH SPEED RECTIFIER APPLICATIONS
(FAST RECOVERY)

- Average Forward Current : $I_F(AV) = 1.5A$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 600V$
- Reverse Recovery Time : $t_{rr} = 100ns$ (Max.)
- Plastic Mold Type.

MAXIMUM RATINGS

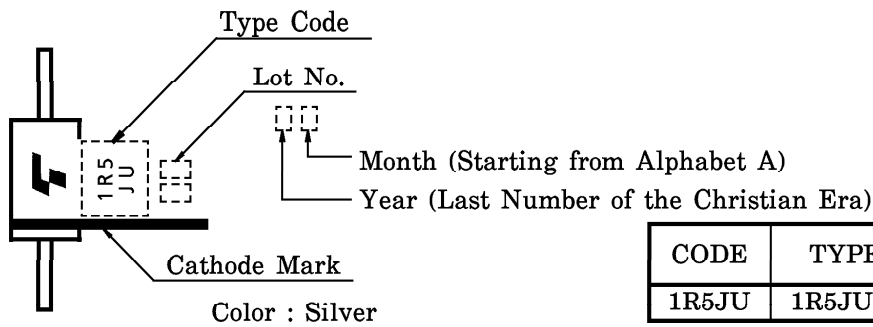
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Average Forward Current	$I_F(AV)$	1.5	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	40 (50Hz)	A
		44 (60Hz)	
Junction Temperature Range	T_j	-40~150	°C
Storage Temperature Range	T_{stg}	-40~150	°C

Unit in mm



Weight : 0.47g

MARKING



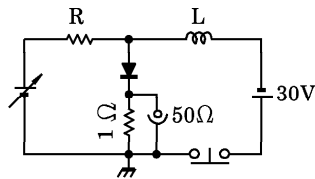
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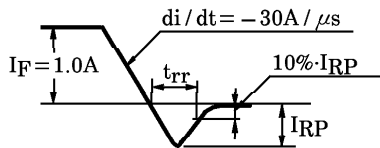
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$V_{FM}=2.0A$	—	—	2.0	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=600V$	—	—	100	μA
Reverse Recovery Time (Note 1)	t_{rr}	$I_F=1A, di/dt = -30A/\mu s$	—	—	100	ns
Forward Recovery Time (Note 2)	t_{fr}	$I_F=1.0A$	—	—	250	ns
Thermal Resistance (Note 3)	$R_{th(j-a)}$	Junction to Ambient	—	—	86	$^{\circ}C/W$
Thermal Resistance (Note 3)	$R_{th(j-l)}$	Junction to Lead	—	—	23	$^{\circ}C/W$

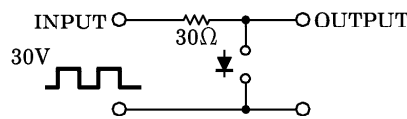
(Note 1) t_{rr} TEST CIRCUIT



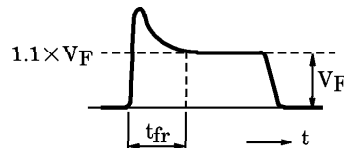
WAVEFORM



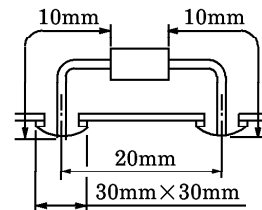
(Note 2) t_{fr} TEST CIRCUIT



WAVEFORM



(Note 3) THERMAL RESISTANCE



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