

TOSHIBA Fast Recovery Diode Silicon Diffused Type

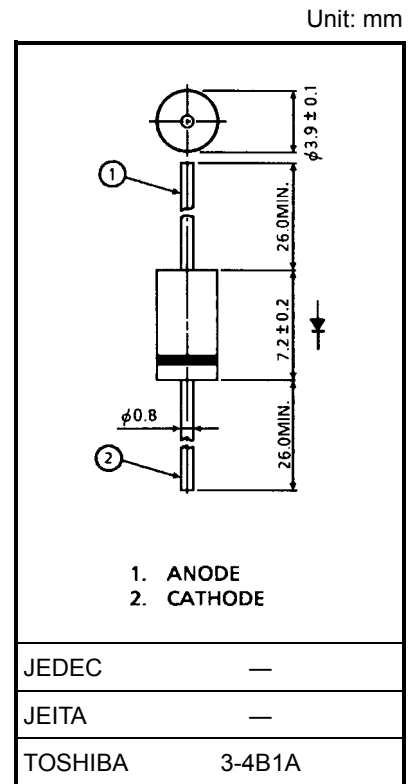
# TVR4J,TVR4N

High Speed Rectifier Applications (fast recovery)

- Repetitive Peak Reverse Voltage:  $V_{RRM} = 600, 1000 \text{ V}$
- Average Forward Current:  $I_F (AV) = 1.2 \text{ A}$  ( $T_a = 55^\circ\text{C}$ )
- Reverse Recovery Time:  $t_{rr} = 20 \mu\text{s}$
- Plastic Mold Type.

## Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Repetitive peak reverse voltage	TVR4J	600	V
	TVR4N	1000	
Average forward current ( $T_a = 55^\circ\text{C}$ )	$I_F (AV)$	1.2	A
Peak one cycle surge forward current (non repetitive)	$I_{FSM}$	100 (50 Hz)	A
Junction temperature	$T_j$	-40 to 150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-40 to 150	$^\circ\text{C}$



## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

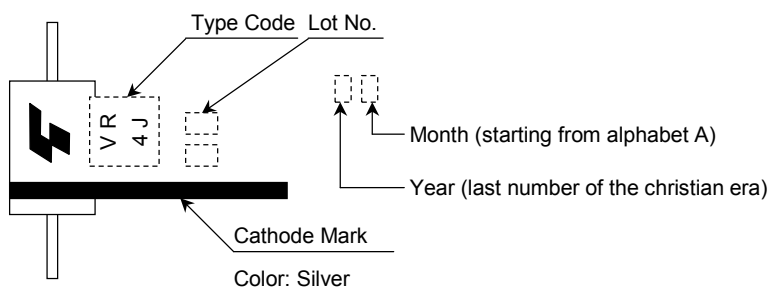
Weight: 0.47 g (typ.)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Peak forward voltage	$V_{FM}$	$I_{FM} = 5 \text{ A}$	—	—	1.2	V
Repetitive peak reverse current	$I_{RRM}$	$V_{RRM} = \text{Rated}$	—	—	10	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F = 20 \text{ mA}, I_R = 1 \text{ mA}$	—	—	20	$\mu\text{s}$
Thermal resistance (junction to ambient)	$R_{th(j-a)}$	DC	—	—	80	$^\circ\text{C/W}$

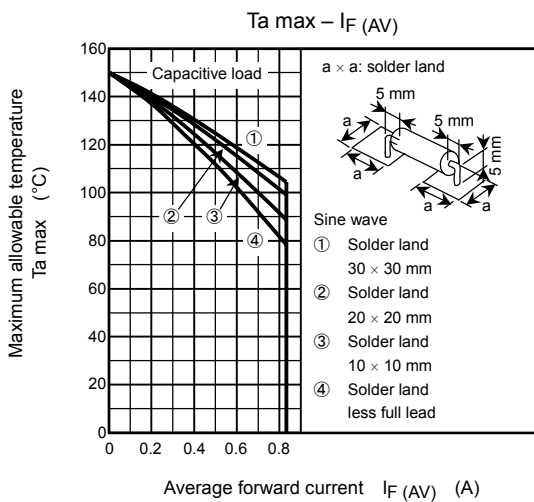
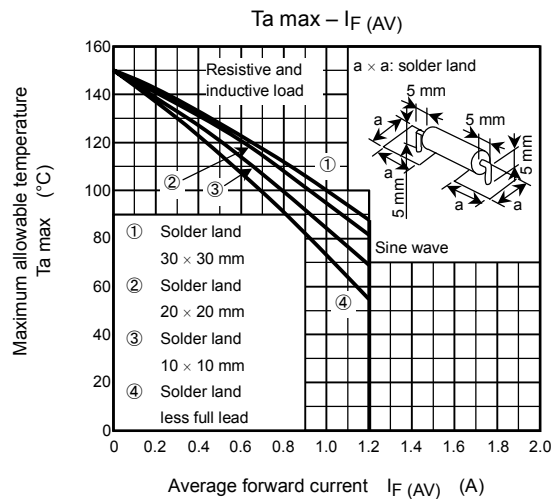
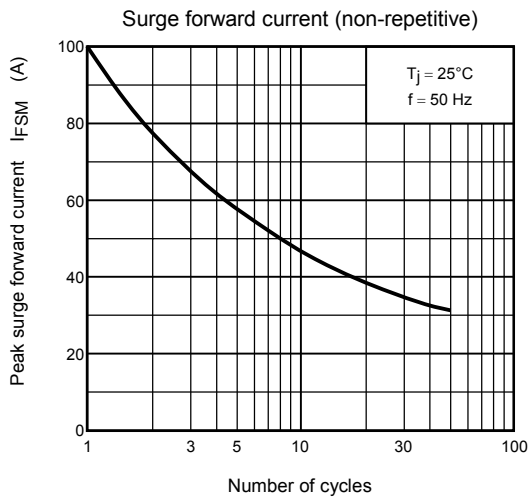
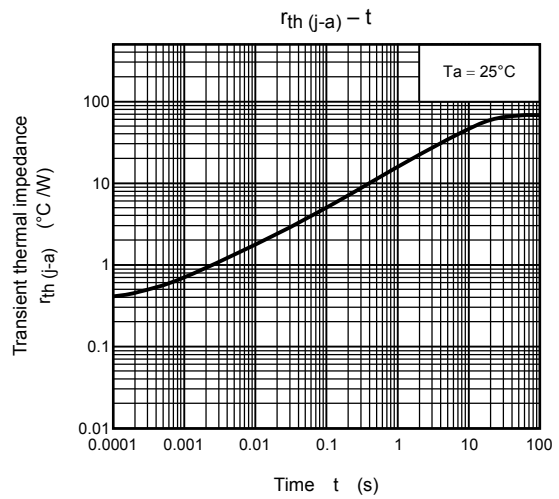
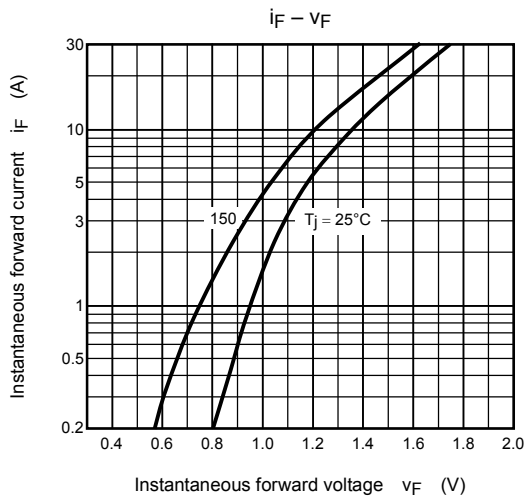
Note1: Soldering: 5 mm is the minimum to be kept between case and soldering part.

Note2: Lead bending: 5 mm is the minimum to be kept from the case when bend the lead wire.

## Marking



Code	Type
VR4J	TVR4J
VR4N	TVR4N



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000707EAA

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