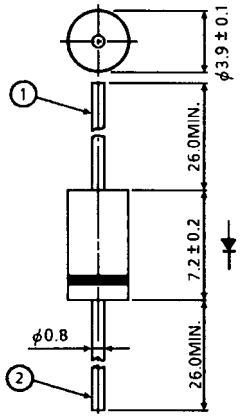
TOSHIBA Fast Recovery Diode Silicon Diffused Type

TVR4J,TVR4N

High Speed Rectifier Applications (fast recovery)

Unit: mm



1. ANODE
2. CATHODE

JEDEC	—
JEITA	—
TOSHIBA	3-4B1A

Weight: 0.47 g (typ.)

- Repetitive Peak Reverse Voltage: V_{RRM} = 600, 1000 V
- Average Forward Current: $I_{F\ (AV)}$ = 1.2 A (Ta = 55°C)
- Reverse Recovery Time: t_{rr} = 20 μs
- Plastic Mold Type.

Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Repetitive peak reverse voltage	TVR4J	V_{RRM}	600	V
	TVR4N		1000	
Average forward current (Ta = 55°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	°C
Storage temperature range		T_{stg}	−40 to 150	°C

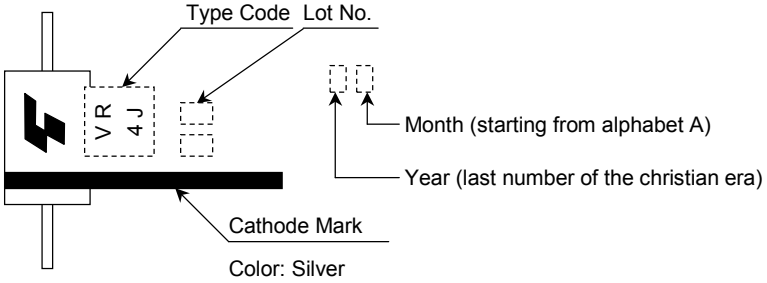
Electrical Characteristics (Ta = 25°C)

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

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

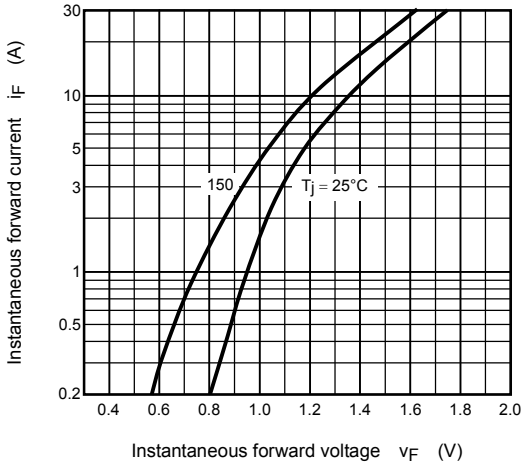
Note2: Lead bending: 5 mm is the minimum to be kept from the case when bend the lead wire.

Marking

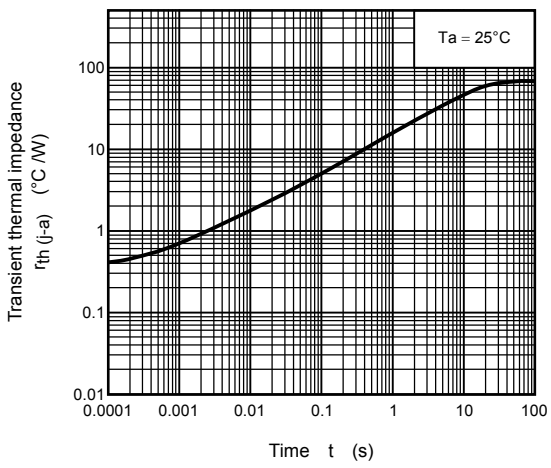


Code	Type
VR4J	TVR4J
VR4N	TVR4N

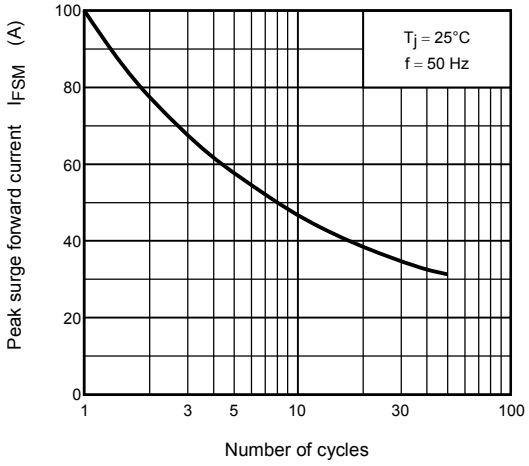
$i_F - v_F$



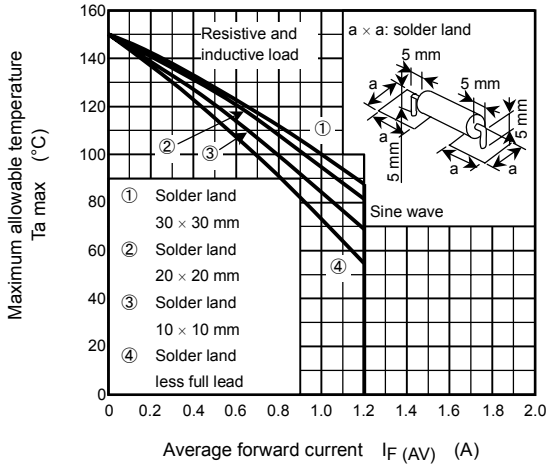
$r_{th\ (j\text{-}a)} - t$



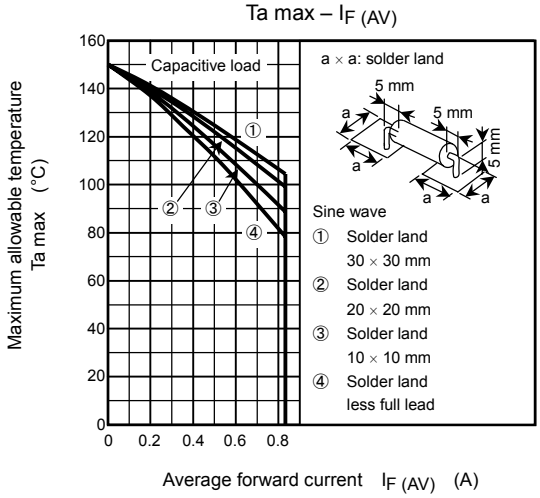
Surge forward current (non-repetitive)



Ta max – $I_{F\ (AV)}$



Ta max – $I_{F\ (AV)}$



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