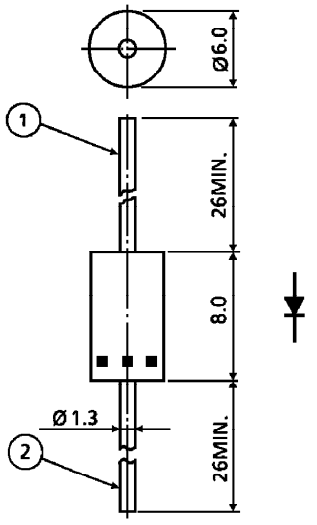
TOSHIBA SUPER FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

3GU41

SWITCHING TYPE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage : V_{RRM} = 100~400V
- Average Forward Current : $I_{F(AV)}$ = 3.0A
- Very Fast Reverse-Recovery Time : t_{rr} = 100ns

Unit in mm



1. ANODE
2. CATHODE

JEDEC	DO-201AD
EIAJ	—
TOSHIBA	3-6E1A

Weight : 1.18g

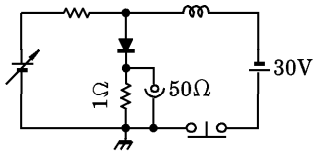
MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Average Forward Current	$I_{F(AV)}$	3.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	80 (50Hz)	A
		88 (60Hz)	
Junction Temperature	T_j	−40~150	°C
Storage Temperature Range	T_{stg}	−40~150	°C

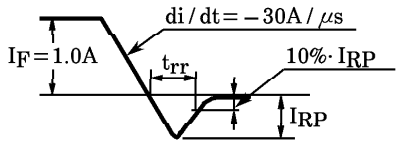
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	I_{FM} = 3.0A	—	—	1.5	V
Repetitive Peak Reverse Current	I_{RRM}	V_{RRM} = 400V	—	—	300	μA
Reverse Recovery Time (Note 1)	t_{rr}	I_F = 1A, di / dt = −30A / μs	—	—	100	ns
Forward Recovery Time (Note 2)	t_{fr}	I_F = 1.0A	—	—	200	ns
Thermal Resistance (Note 3)	$R_{th(j-a)}$	Junction to Ambient	—	—	37	°C / W
Thermal Resistance (Note 4)	$R_{th(j-\ell)}$	Junction to Lead	—	—	12	°C / W

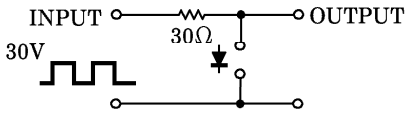
Note 1 : t_{rr} TEST CIRCUIT



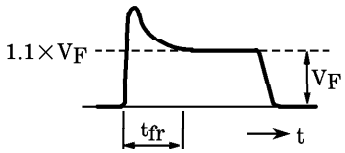
WAVEFORM



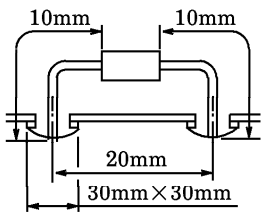
Note 2 : t_{fr} TEST CIRCUIT



WAVEFORM

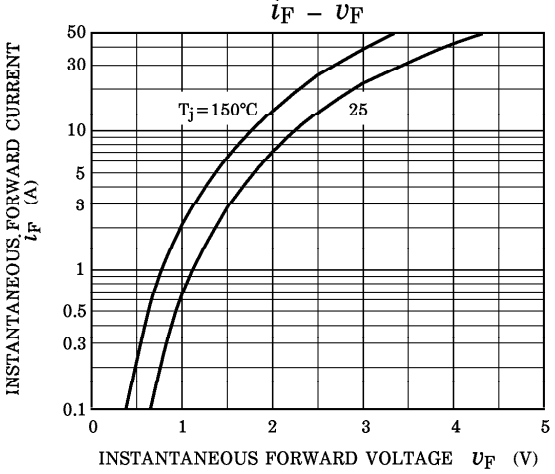


Note 3 : THERMAL RESISTANCE

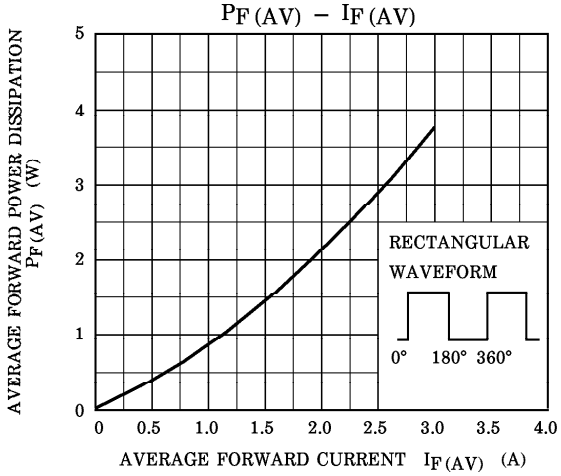


961001EAA2

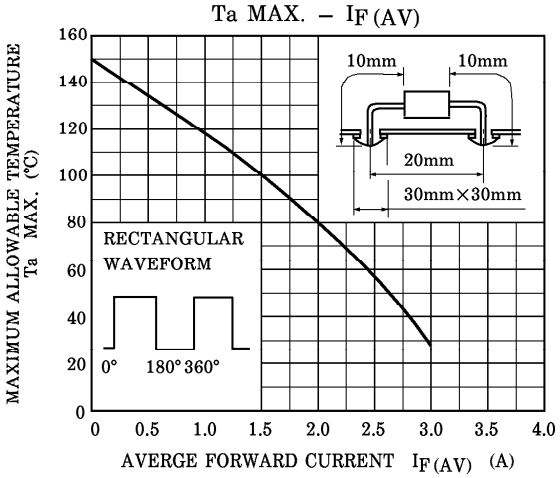
$i_F - v_F$



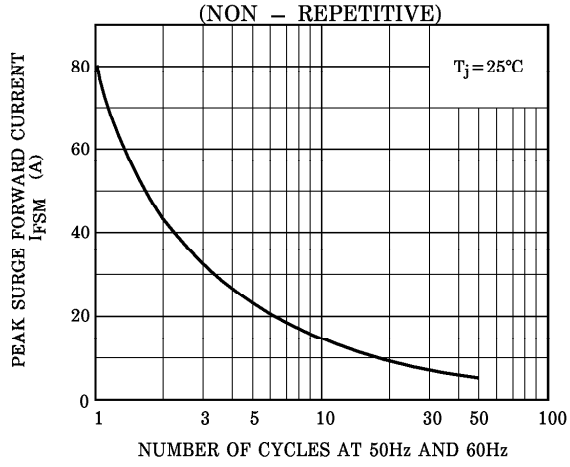
$P_{F(AV)} - I_{F(AV)}$



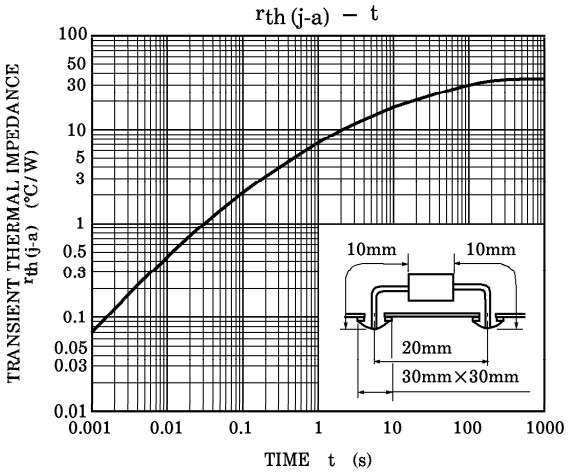
Ta MAX. – $I_{F(AV)}$



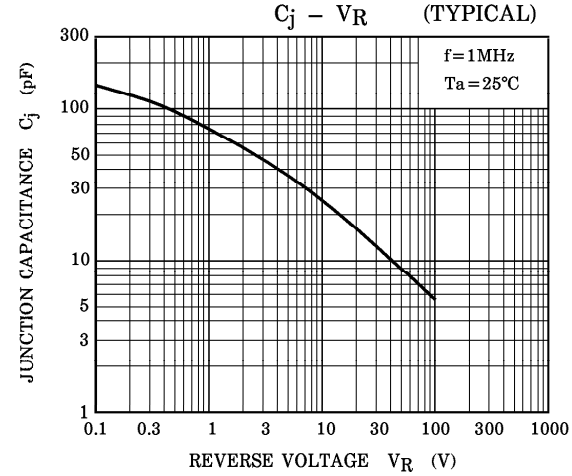
SURGE FORWARD CURRENT
(NON – REPETITIVE)



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



$C_j - V_R$ (TYPICAL)



961001EAA2'

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.