

TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

1GWJ42

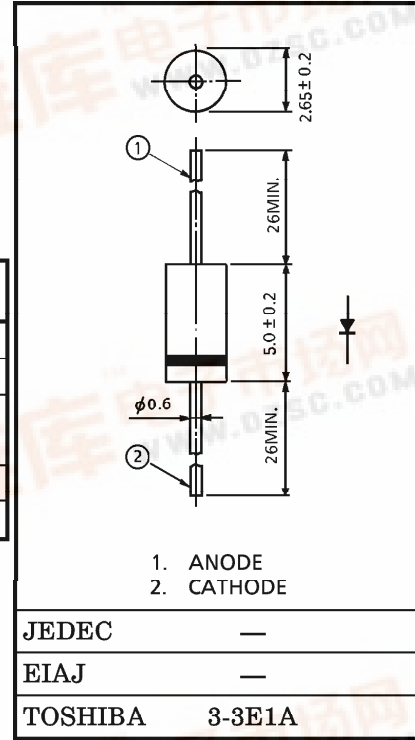
HIGH SPEED RECTIFIER APPLICATIONS

- Average Forward Current : $I_F(AV)=1.0A$ ($T_a=52^\circ C$)
- Reverse Recovery Time : $t_{rr}=35ns$ (MAX.)
- Low Forward Voltage : $V_{FM}=0.55V$ (MAX.)

MAXIMUM RATINGS

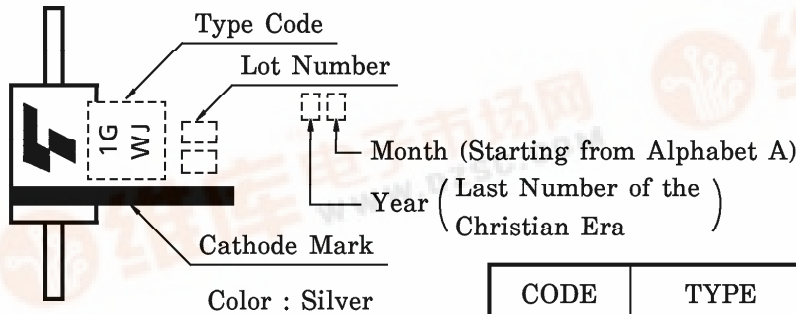
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Average Forward Current	$I_F(AV)$	1.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	40 (50Hz)	A
Junction Temperature	T_j	-40~125	°C
Storage Temperature Range	T_{stg}	-40~125	°C

Unit in mm



Weight : 0.225g

MARKING



CODE	TYPE
1GWJ	1GWJ42

961001EAA2

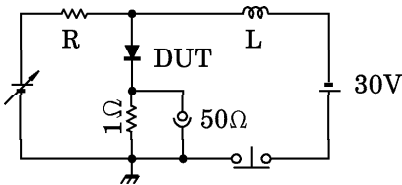
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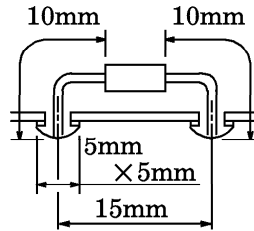
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 1.0A$	—	—	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 40V$	—	—	0.5	mA
Reverse Recovery Time (Note 1)	t_{rr}	$I_F = 1.0A, di/dt = -30A/\mu s$	—	—	35	ns
Junction Capacitance	C_j	$V_R = 10V, f = 1MHz$	—	52	—	pF
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	DC (Note 2)	—	—	125	°C/W
Thermal Resistance (Junction to Lead)	$R_{th(j-l)}$	DC (Note 2)	—	—	60	°C/W

(Note 1) t_{rr} TEST CIRCUIT



(Note 2) THERMAL RESISTANCE



t_{rr} WAVEFORM

