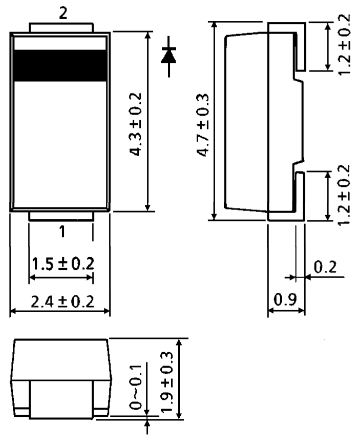
TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

U2GWJ44

SWITCHING POWER SUPPLY APPLICATION

Unit in mm

- Low Forward Voltage : $V_{FM}=0.55V$ (Max.)
- Average Forward Current : $I_{F(AV)}=2.0A$
- Repetitive Peak Reverse Voltage : $V_{RRM}=40V$
- Surface Mounting Plastic Mold Package



1. ANODE
2. CATHODE

JEDEC	—
EIAJ	—
TOSHIBA	3-4D1A

Weight : 0.06g

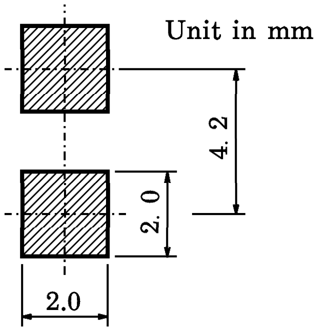
MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Average Forward Current	$I_{F(AV)}$	2.0	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

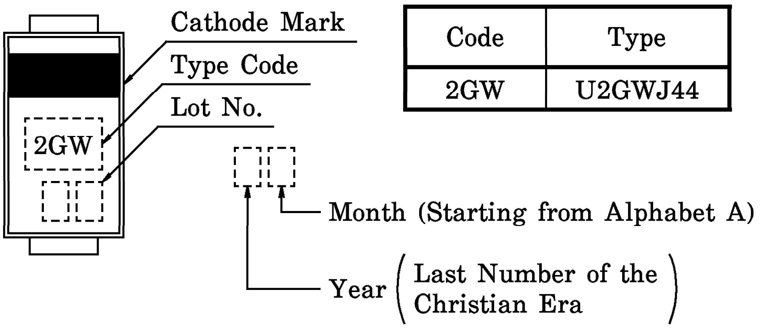
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM}=2.0A$	—	—	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=40V$	—	—	500	μA
Junction Capacitance	C_j	$V_R=10V$, $f=1.0MHz$	—	125	—	pF
Thermal Resistance (Junction to Ambient)	$r_{th\ (j\text{-}a)}$	On ceramic substrate	—	—	60	°C / W
		On glass-epoxy substrate	—	—	145	

Standard Soldering Pad



MARKING



Code	Type
2GW	U2GWJ44

961001EAA2

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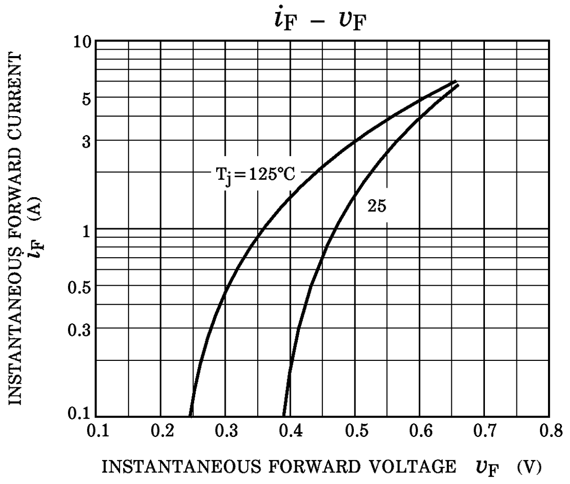
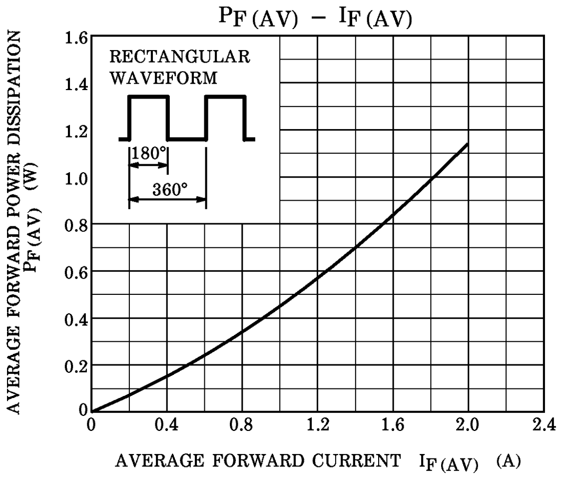
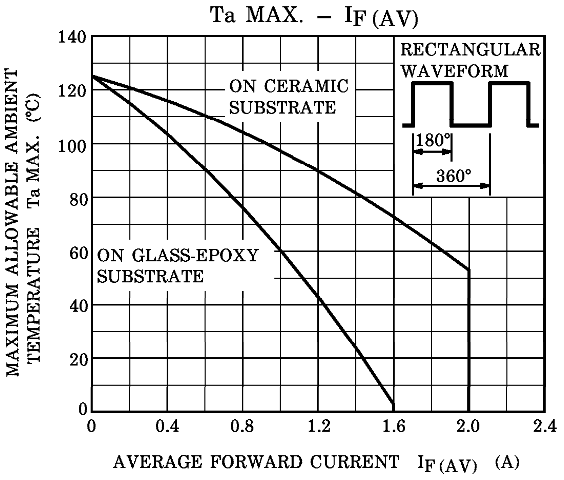


$i_F - v_F$

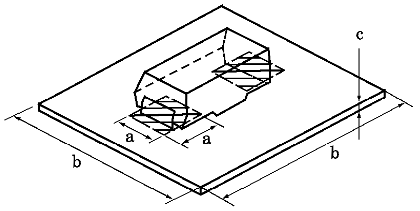


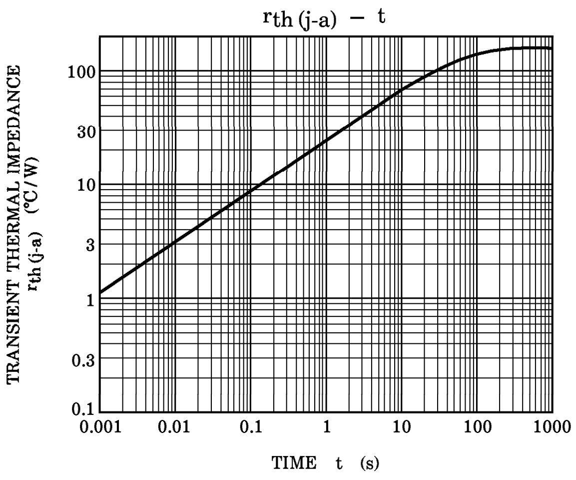
$P_{F(AV)} - I_{F(AV)}$



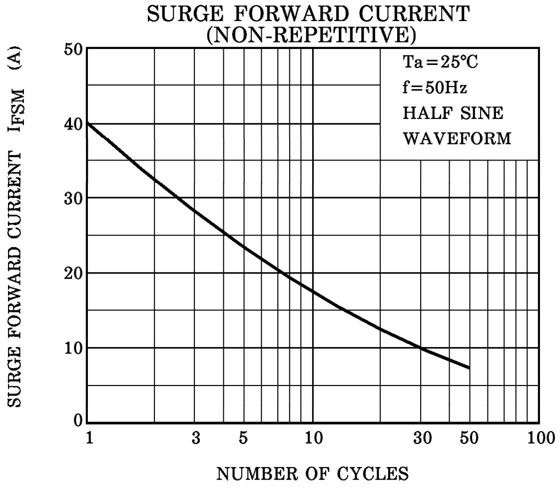
Ta MAX. $- I_{F(AV)}$

	ON CERAMIC SUBSTRATE	ON GLASS-EPOXY SUBSTRATE
Soldering land : a	2mm×2mm	6mm×6mm
Substrate size : b	50mm×50mm	50mm×50mm
Substrate thickness : c	0.64mm	1.6mm



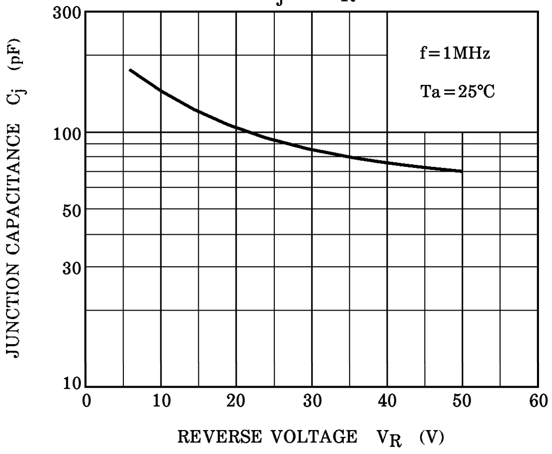


$r_{th\,(j\text{-}a)} - t$

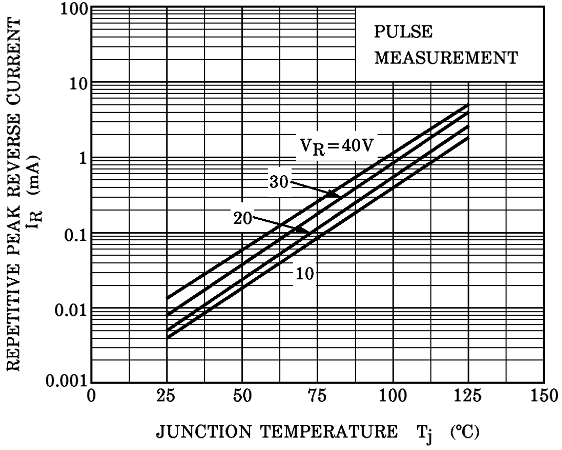


SURGE FORWARD CURRENT (NON-REPETITIVE)

C_j – V_R (TYPICAL)



I_R – T_j (TYPICAL)



$P_{R(AV)}$ – V_R (TYPICAL)