Unit in mm

## TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

# 3 G W J 4 2

#### HIGH SPEED RECTIFIER APPLICATIONS

• Average Forward Current : IF(AV)=3.0A

• Low Forward Voltage : V<sub>FM</sub> = 0.55V (Max.)

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V	
Average Forward Current	I <sub>F</sub> (AV)	3.0	A	
Peak One Cycle Surge Forward	Trace	120 (50Hz)	A	
Current (Non-Repetitive)	I <sub>FSM</sub>	132 (60Hz)		
Junction Temperature	$T_{j}$	-40~125	°C	
Storage Temperature Range	$T_{ m stg}$	-40~125	°C	

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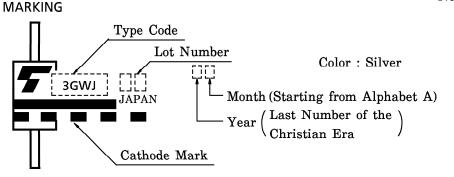
TOSHIBA 3-6E1A

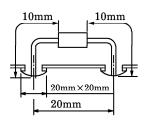
#### Weight: 1.18g

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{\mathbf{FM}}$	$I_{\text{FM}} = 3.0 \text{A}$	_	_	0.55	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM} = 40V$	_	_	3.0	mA
Reverse Recovery Time	$t_{rr}$	$I_{\rm F} = 1.0 A$ , di/dt = $-30 A/\mu s$	_	-	35	ns
Junction Capacitance	$C_{j}$	$V_R = 10V, f = 1MHz$	_	132	_	pF
Thermal Resistance (Note 1)	R <sub>th (j-a)</sub>	Junction to Ambient	_	_	57	°C/W
Thermal Resistance (Note 1)	$ m R_{th(j-\ell)}$	Junction to Lead	_	_	14	°C/W

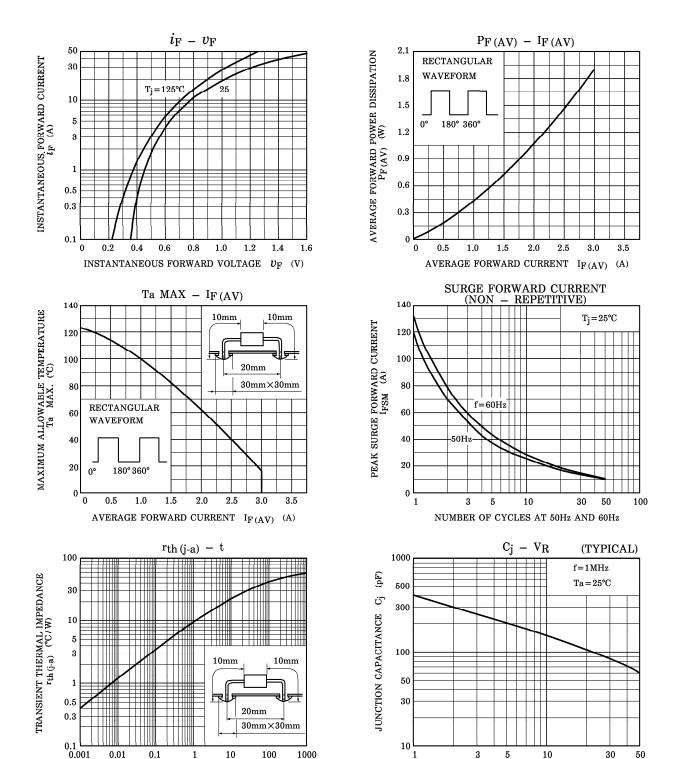
## Note 1: THERMAL RESISTANCE





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TIME t (s)

REVERSE VOLTAGE  $V_R$  (V)

