

TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

CMS10

Unit:mm

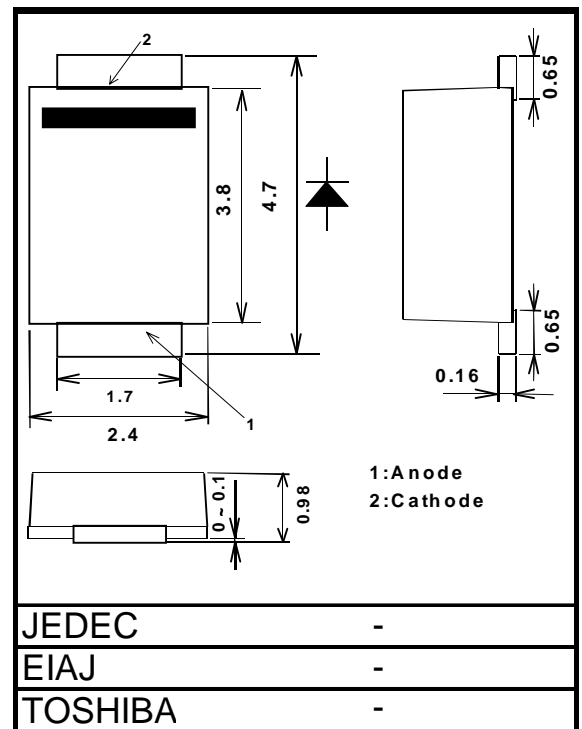
OSWITCHING MODE POWER SUPPLY APPLICATIONS
 OPORTABLE EQUIPMENT BATTERY APPLICATIONS

- Forward Voltage : $V_{FM}=0.55V(\text{Max.})$
- Average Forward Current : $I_{F(AV)}=1.0A$
- Repetitive Peak Reverse Voltage : $V_{RRM}=40V$
- Small & Thin Package

● MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Average Forward Current *1	$I_{F(AV)}$	1.0 ($T_a=21^\circ\text{C}$)	A
Peak One Cycle Surge Forward Current(Non-Repetitive)	I_{FSM}	25(50Hz)	A
Junction Temperature	T_j	-40~150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40~150	$^\circ\text{C}$

*1 Glass-epoxy Substrate(Substrate size:50mm*50mm
 Soldering land:6mm*6mm)



Weight:0.023g

● ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$)

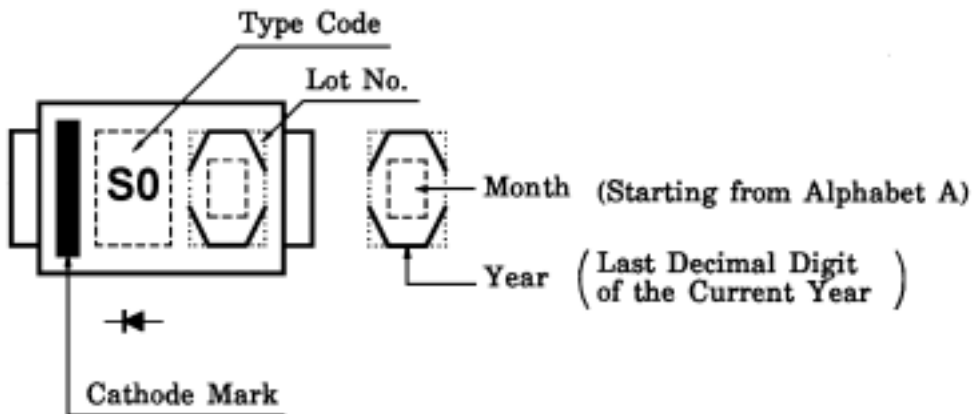
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM(1)}$	$I_{FM}=0.1A$	-	0.34	-	V
	$V_{FM(2)}$	$I_{FM}=0.5A$	-	0.41	-	V
	$V_{FM(3)}$	$I_{FM}=1.0A$	-	0.47	0.55	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=5V$	-	1.0	-	μA
	I_{RRM}	$V_{RRM}=40V$	-	8.0	500	μA
Junction Capacitance	C_j	$V_R=10V, f=1.0\text{MHz}$	-	50	-	pF
Thermal Resistance	$R_{th(j-a)}$	On ceramic substrate (Soldering Land 2mm*2mm)	-	-	60	$^\circ\text{C/W}$
		On glass-epoxy substrate (Soldering Land 6mm*6mm)	-	-	135	$^\circ\text{C/W}$
	$R_{th(j-l)}$	-	-	-	16	$^\circ\text{C/W}$

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MARKING

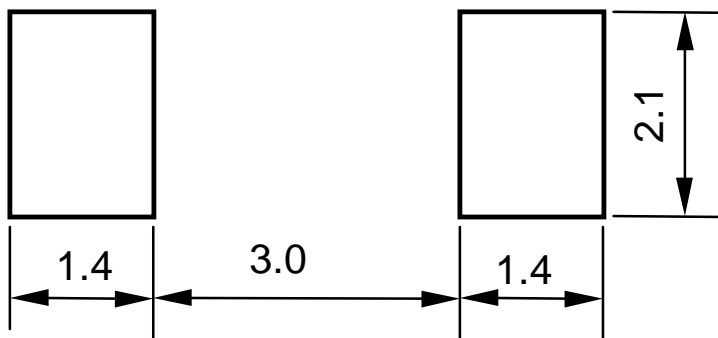


FOLLOWING INDICATES THE DATE OF MANUFACTURE

0	1	2	3	4
5	6	7	8	9

Standard Soldering pad

Unit:mm

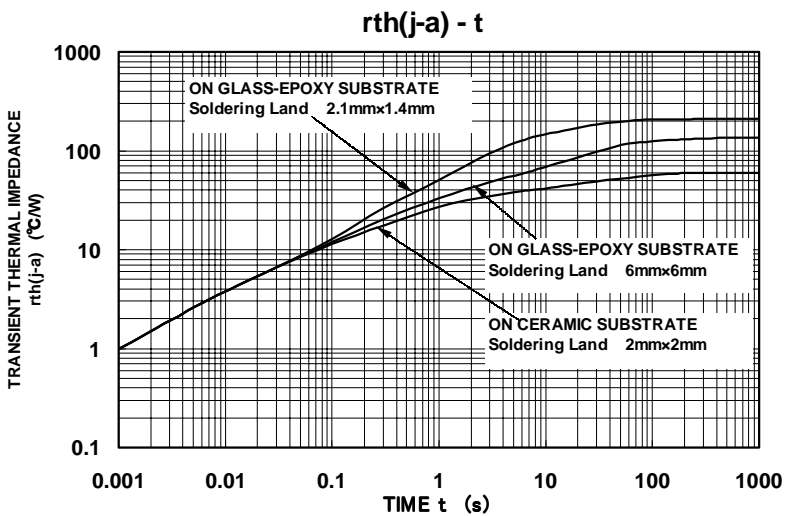
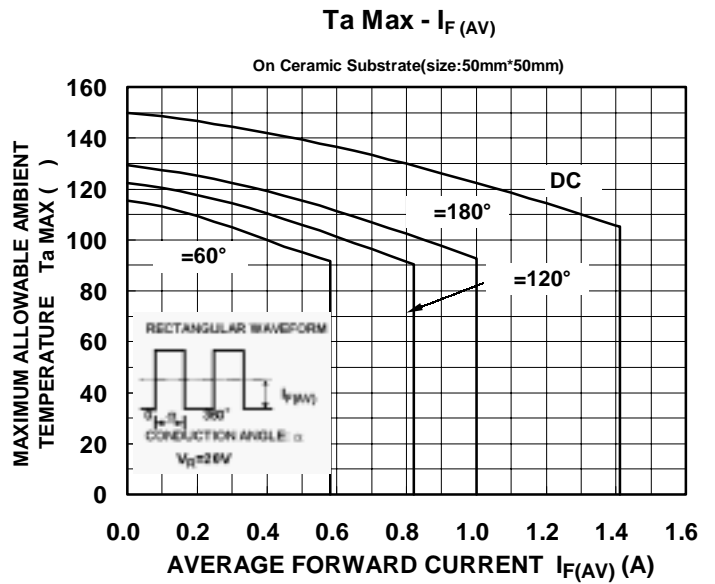
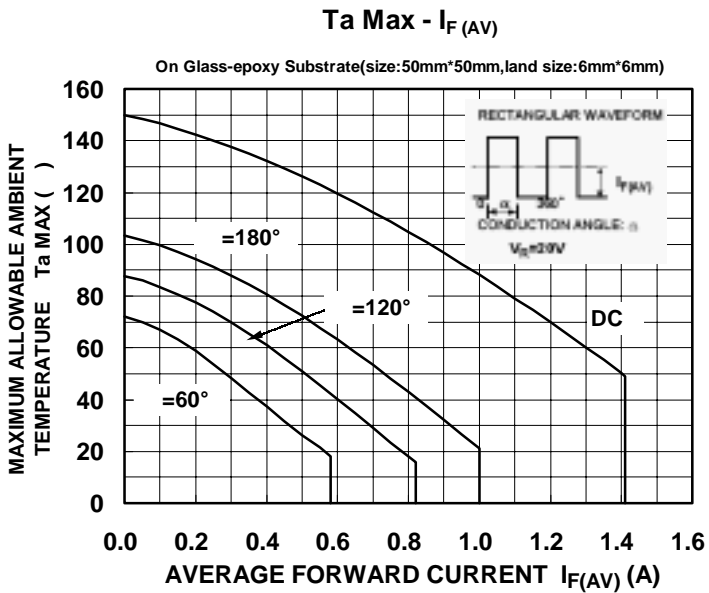
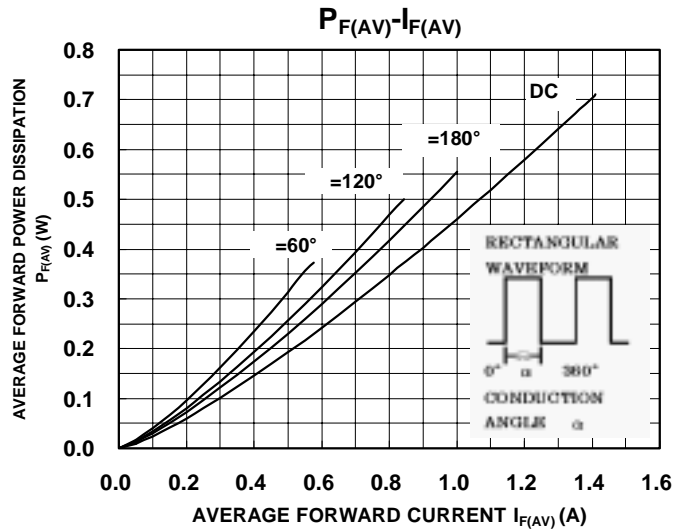
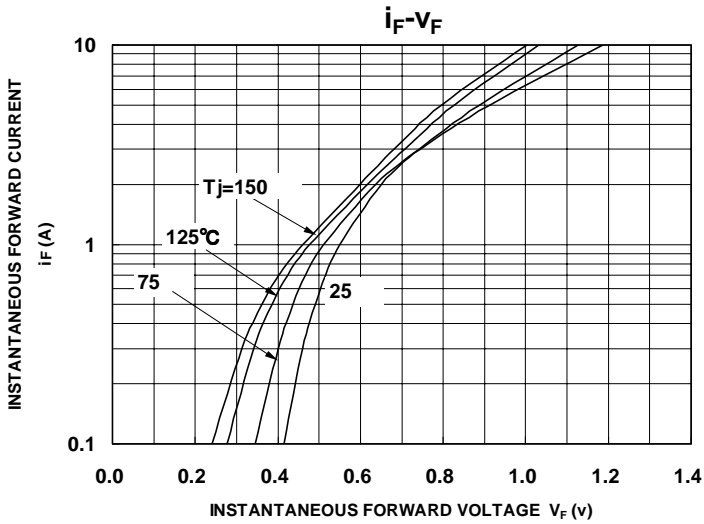


HANDLING PRECAUTION

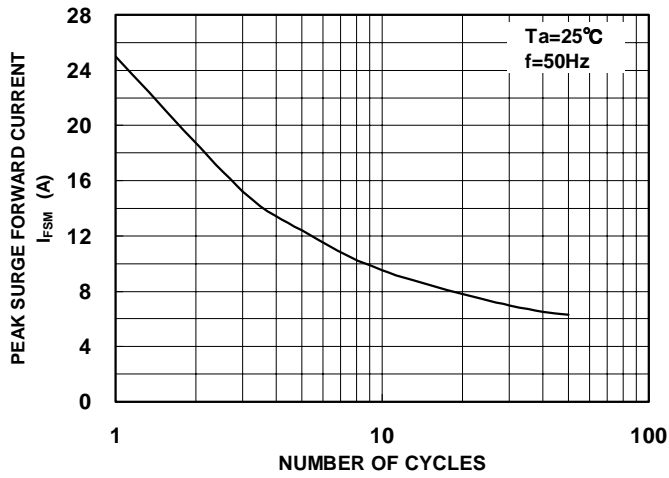
Schottky barrier diodes are having large-reverse-current-leakage characteristic compare to the other rectifier products. This current

leakage and not proper operating temperature or voltage may cause thermal run.

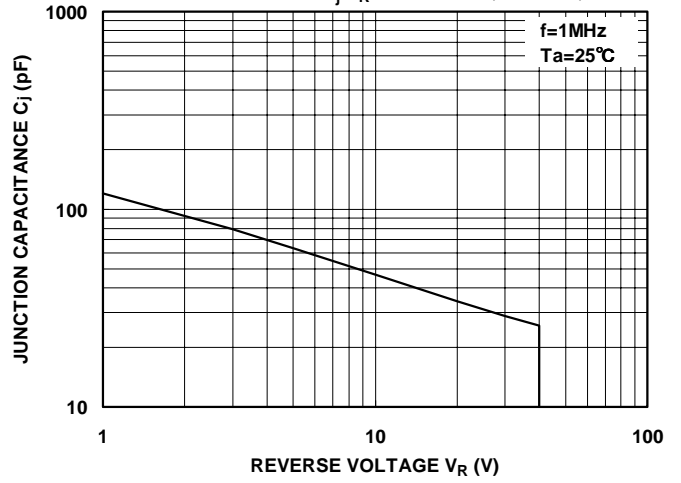
Please take forward and reverse loss into consideration when you design.



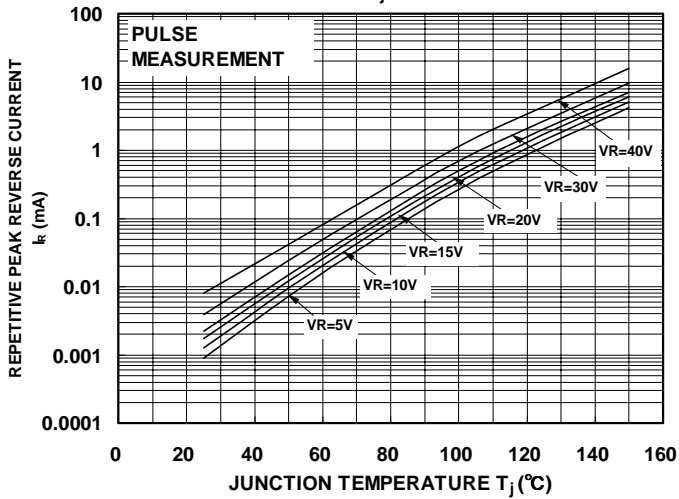
**SURGE FORWARD CURRENT
(NON-REPETITIVE)**



$C_j - V_R$ (TYPICAL)



$I_R - T_j$ (TYPICAL)



$P_{R(AV)} - V_R$ (TYPICAL)

