

TOSHIBA SCHOTTKY BARRIER RECTIFIER SCHOTTKY BARRIER TYPE

CRS04

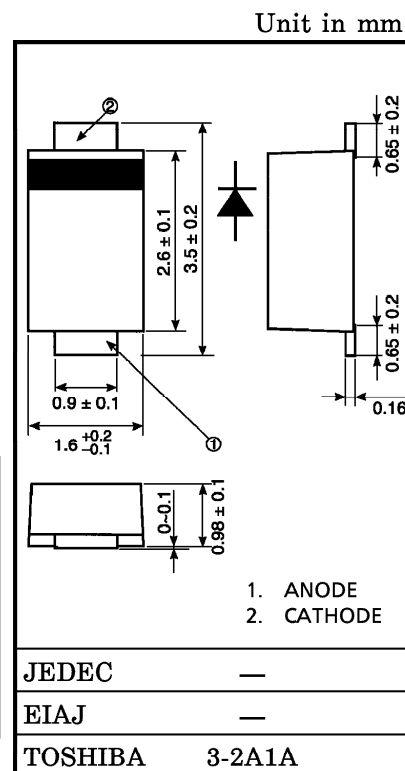
SWITCHING TYPE POWER SUPPLY APPLICATIONS

PORTABLE EQUIPMENT BATTERY APPLICATIONS

- Forward Voltage : $V_{FM} = 0.49 \text{ V (Max.)}$
- Average Forward Current : $I_F (AV) = 1.0 \text{ A}$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 40 \text{ V}$
- Small Package : S-FLAT™ (Toshiba designation)

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}	20 (50 Hz)	A
Junction Temperature	T_j	-40~150	°C
Storage Temperature Range	T_{stg}	-40~150	°C



Weight : 0.013 g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM} (1)$	$I_{FM} = 0.1 \text{ A}$	—	0.395	—	V
	$V_{FM} (2)$	$I_{FM} = 0.7 \text{ A}$	—	0.475	0.49	V
	$V_{FM} (3)$	$I_{FM} = 1.0 \text{ A}$	—	0.51	—	V
Repetitive Peak Reverse Current	$I_{RRM} (1)$	$V_{RRM} = 5 \text{ V}$	—	0.6	—	μA
	$I_{RRM} (2)$	$V_{RRM} = 40 \text{ V}$	—	—	100	μA
Junction Capacitance	C_j	$V_R = 10 \text{ V}, f = 1.0 \text{ MHz}$	—	47	—	pF
Thermal Resistance	$R_{th} (j-a)$	On ceramic substrate (Soldering Land 2 mm × 2 mm)	—	—	70	°C / W
		On glass-epoxy substrate (Soldering Land 6 mm × 6 mm)	—	—	140	°C / W

HANDLING PRECAUTION

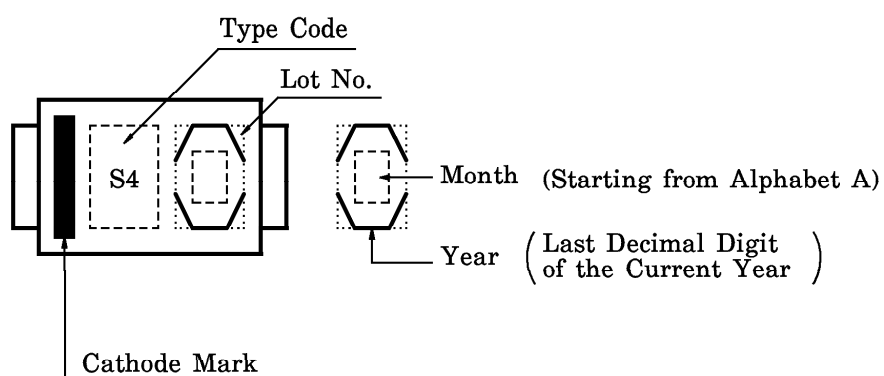
Schottky barrier diodes are having large-reverse-current-leakage characteristic compare to the other rectifier products. This current leakage and not proper operating temperature or voltage may cause thermal run.

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

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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

