Toshiba Schottky Barrier Rectifier Schottky Barrier Type

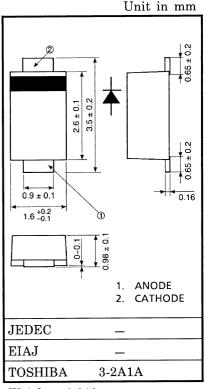
CRS09

Switching Type Power Supply Applications Portable Equipment Battery Applications

- Forward voltage: V_{FM} = 0.46 V (max)
- Average forward current: IF (AV) = 1.5 A
- Repetitive peak reverse voltage: V_{RRM} = 30 V
- Small package: "S-FLATTM" (Toshiba designation)

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current	I _{F (AV)}	1.5	Α
Peak one cycle surge forward current (non-repetitive)	I _{FSM}	30 (50 Hz)	А
Junction temperature	Tj	-40~150	°C
Storage temperature	T _{stg}	-40~150	°C



Weight: 0.013g

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Peak forward voltage	V _{FM (1)}	I _{FM} = 0.1 A	_	0.35	_	V
	V _{FM (2)}	I _{FM} = 1.0 A	_	0.415	_	
	V _{FM (3)}	I _{FM} = 1.5 A	_	0.43	0.46	
Repetitive peak reverse current –	IRRM (1)	V _{RRM} = 5 V	_	0.8	_	μА
	I _{RRM (2)}	V _{RRM} = 30 V	_	10	50	
Junction capacitance	Cj	V _R = 10 V, f = 1.0 MHz	_	90	_	pF
Thermal resistance F		On ceramic substrate (soldering land 2 mm × 2 mm)		70	2011	
	R _{th (j-a)}	On glass-epoxy substrate (soldering land 6 mm × 6 mm)	_	_	140	°C/W

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ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.

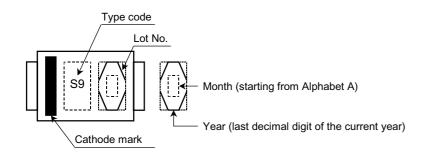
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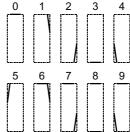
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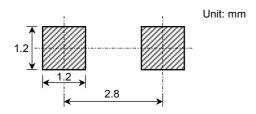
Marking

Following Indicates the Date of Manufacture





Standard Soldering Pad



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.

