TOSHIBA High Efficiency Rectifier Silicon Epitaxial Type

CRH01

Switching Mode Power Supply Applications

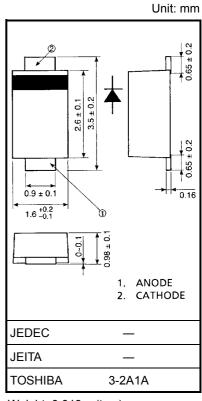
Repetitive peak reverse voltage: V_{RRM} = 200 V

• Average forward current: IF (AV) = 1.0 A

- Low forward voltage: $V_{FM} = 0.98 \text{ V (Max.)}$
- Very Fast Reverse-Recovery Time: $t_{rr} = 35 \text{ ns (Max.)}$
- Suitable for compact assembly due to small surface-mount package "S-FLATTM" (Toshiba package name)

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	٧
Average forward current	I _{F(AV)}	1.0	Α
Peak one cycle surge forward current (non-repetitive)	I _{FSM}	15 (50 Hz)	А
Junction temperature	Tj	−40~150	°C
Storage temperature range	T _{stg}	− 40~150	°C



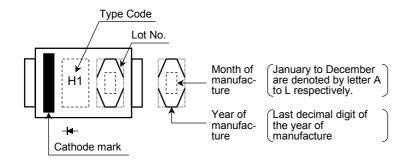
Weight: 0.013 g (typ.)

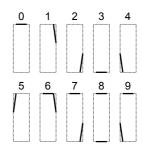
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit	
Peak forward voltage	V _{FM (1)}	I _{FM} = 0.1 A	_	0.71	_		
	V _{FM (2)}	I _{FM} = 0.7 A	_	0.86	_	V	
	V _{FM (3)}	I _{FM} = 1.0 A	_	0.90	0.98		
Repetitive peak reverse current	I _{RRM}	V _{RRM} = 200 V	_	_	10	μΑ	
Reverse recovery time	t _{rr}	$I_F = 1 \text{ A, di/dt} = -30 \text{ A/}\mu\text{s}$	_	_	35	ns	
Forward recovery time	t _{fr}	I _F = 1 A	_	_	100	ns	
Thermal resistance R _{tl}	D.,	Device mounted on a ceramic board (soldering land: 2 mm × 2 mm)	_	_	65	· °C/W	
	R _{th (j-a)}	Device mounted on a glass-epoxy board (soldering land: 6 mm × 6 mm)		_	130		

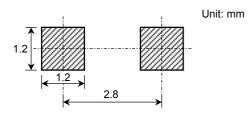
Marking

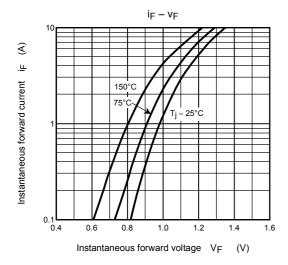
Following Indicates the Date of Manufacture

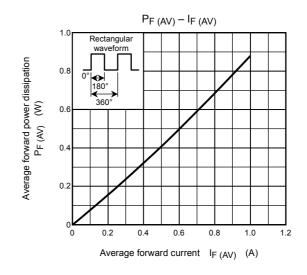


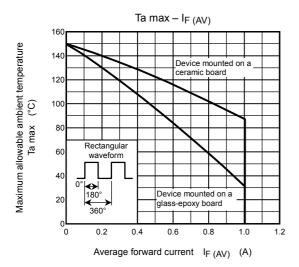


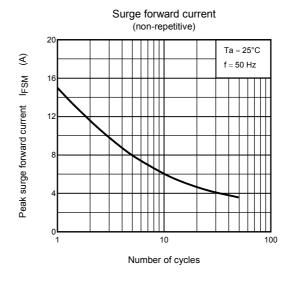
Standard Soldering Pad

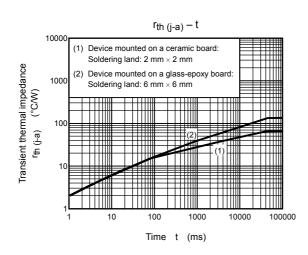


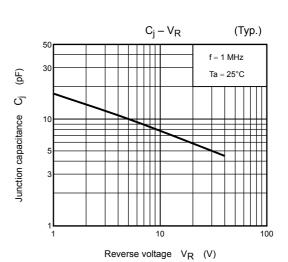












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