TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS417

High Speed Switching Application

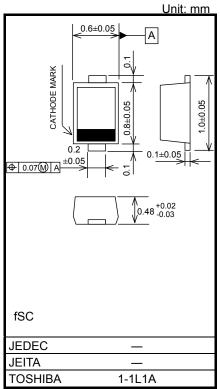
• Small package

Low forward voltage: V_{F (3)} = 0.56V (typ.)

Low reverse current: I_R = 5μA (Max.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	45	V
Reverse voltage	V _R	40	V
Maximum (peak) forward current	I _{FM}	200	mA
Average forward current	Io	100	mA
Surge current (10ms)	I _{FSM}	1	Α
Power dissipation	P*	100	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C
Operating temperature range	T _{opr}	-40~100	°C



Note: Using continuously under heavy loads (e.g. the application of high Weight: 0.6mg(typ.)

temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

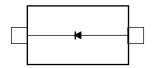
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

* Mounted on a glass epoxy circuit board of 20 × 20 mm, pad dimension of 4 × 4 mm.

Electrical Characteristics (Ta = 25°C)

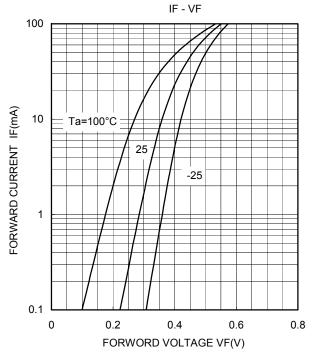
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V _{F (1)}	_	I _F = 1mA	_	0.28	_		
	V _{F (2)}	_	I _F = 10mA	_	0.36	_	V	
	V _{F (3)}	_	I _F = 50mA	_	0.56	0.62		
Reverse current	I _R	_	V _R = 40V	_	_	5	μA	
Total capacitance	C _T	_	V _R = 0, f = 1MH _z	_	15	_	pF	

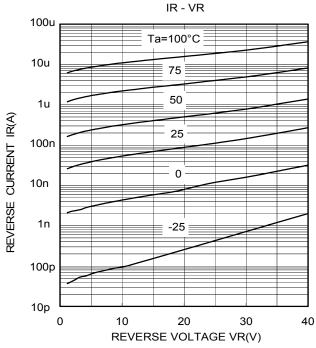
Equivalent Circuit (Top View)

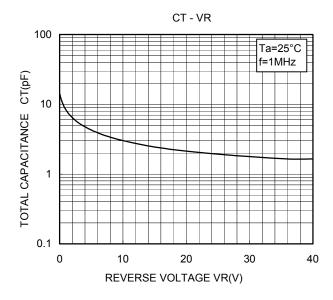


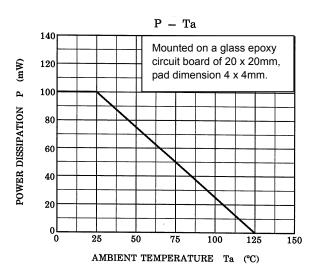
Marking











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