TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

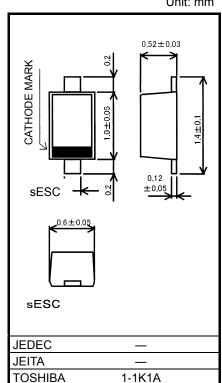
1SS419

High-Speed Switching Applications

- Small package
- Low forward voltage: $V_{F(3)} = 0.56 V (typ.)$
- Low reverse current: $I_R = 5 \mu A (max)$

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	Ι _Ο	100	mA
Surge current (10 ms)	I _{FSM}	1	А
Power dissipation	P *	100	mW
Junction temperature	Тj	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: 0.0011 g (typ.) temperature/current/voltage and the significant change in

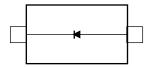
temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings. Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability 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 dimensions of 4 × 4 mm.

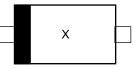
Electrical Characteristics (Ta = 25°C)

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

Equivalent Circuit (Top View)

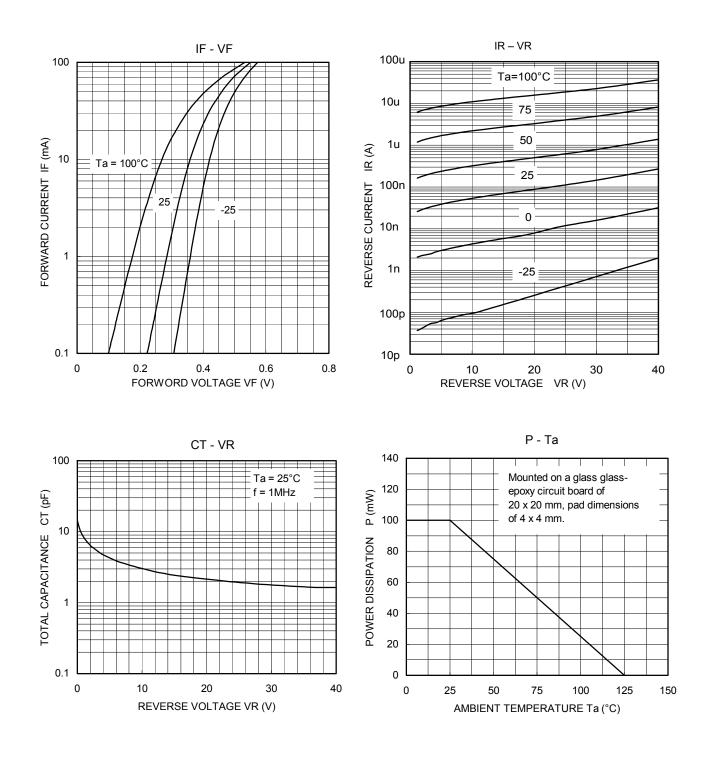








TOSHIBA



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20070701-EN GENERAL

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