TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS419**

# **High-Speed Switching Applications**

• Small package

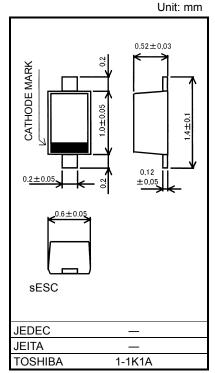
Low forward voltage: V<sub>F</sub> (3) = 0.56 V (typ.)

• Low reverse current: I<sub>R</sub> = 5 μA (max)

### **Maximum Ratings (Ta = 25°C)**

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

Mounted on a glass-epoxy circuit board of  $20 \times 20$  mm, pad dimensions of  $4 \times 4$  mm.

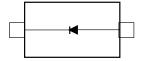


Weight: 0.0011 g (typ.)

## Electrical Characteristics (Ta = 25°C)

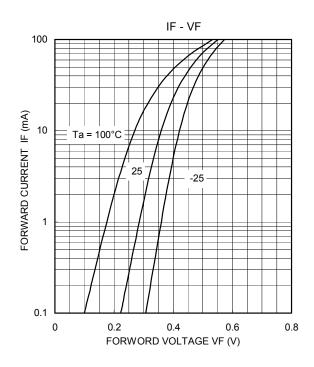
Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F (1)</sub>	I <sub>F</sub> = 1 mA	_	0.28	_	
	V <sub>F (2)</sub>	I <sub>F</sub> = 10 mA	_	0.36	_	V
	V <sub>F (3)</sub>	I <sub>F</sub> = 50 mA	_	0.56	0.62	
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 40 V	_	_	5	μΑ
Total capacitance	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1 MH <sub>z</sub>		15	-	pF

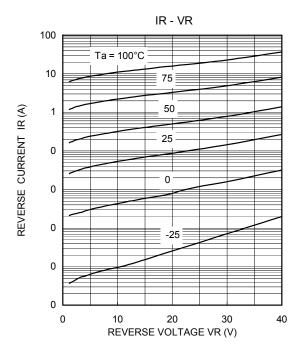
## **Equivalent Circuit (Top View)**

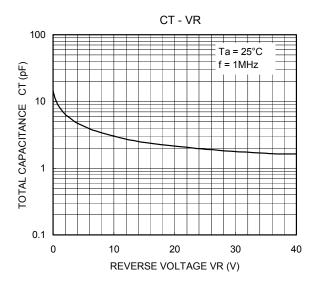


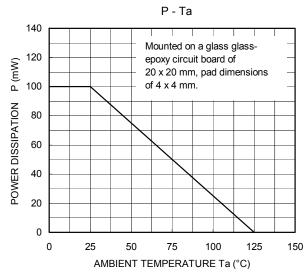
#### Marking











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