TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS424**

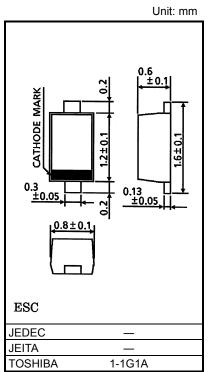
### **High-Speed Switching Applications**

• Low forward voltage :  $V_{F(3)} = 0.50 \text{ V (typ.)}$ 

# **Maximum Ratings (Ta = 25°C)**

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	30	V
Reverse voltage	V <sub>R</sub>	20	V
Maximum (peak) forward current	I <sub>FM</sub>	300	mA
Average forward current	I <sub>O</sub>	200	mA
Surge current (10 ms)	I <sub>FSM</sub>	1	Α
Power dissipation	P*	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C
Operating temperature range	T <sub>opr</sub>	-40~100	°C

<sup>\*:</sup> Mounted on a glass-epoxy circuit board of 20 × 20 mm, pad dimensions of 4 × 4 mm.



Weight: 1.4 mg (typ.)

# **Electrical Characteristics (Ta = 25°C)**

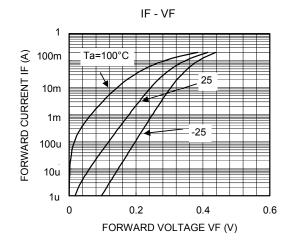
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 1 mA	_	0.18	_	
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 5 mA	_	0.23	_	V
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 200 mA	_	0.42	0.5	
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 10 V	_	_	30	
	I <sub>R (2)</sub>	_	V <sub>R</sub> = 20 V	_	_	50	μA
Total capacitance	C <sub>T</sub>	_	V <sub>R</sub> = 0, f = 1 MH <sub>z</sub>	_	20	_	pF

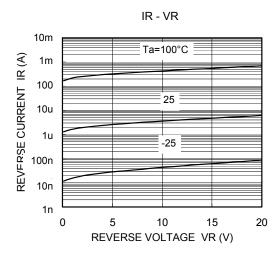
## **Equivalent Circuit (Top View)**

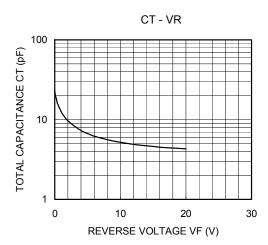


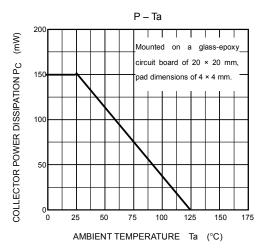
### Marking











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