

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

## 1SS424

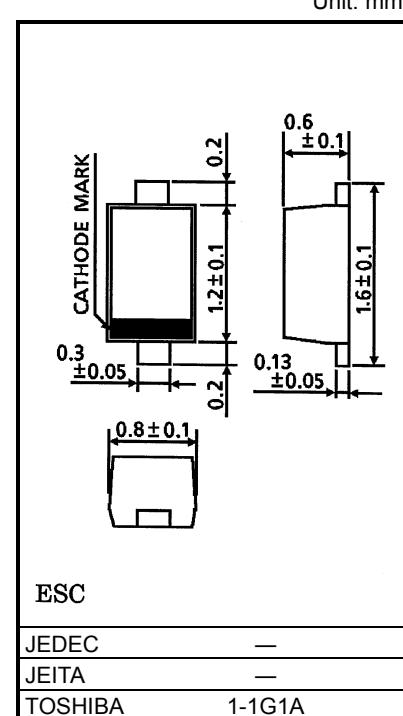
## High-Speed Switching Applications

- Low forward voltage :  $V_F(3) = 0.50$  V (typ.)

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	30	V
Reverse voltage	$V_R$	20	V
Maximum (peak) forward current	$I_{FM}$	300	mA
Average forward current	$I_o$	200	mA
Surge current (10 ms)	$I_{FSM}$	1	A
Power dissipation	$P^*$	150	mW
Junction temperature	$T_j$	125	°C
Storage temperature range	$T_{stg}$	-55~125	°C
Operating temperature range	$T_{opr}$	-40~100	°C

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



Weight: 1.4 mg (typ.)

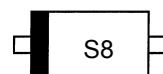
## Electrical Characteristics (Ta = 25°C)

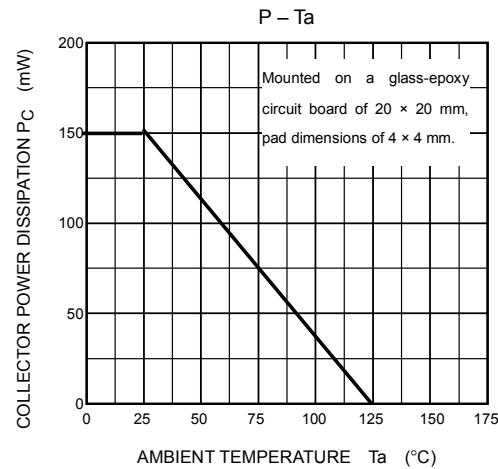
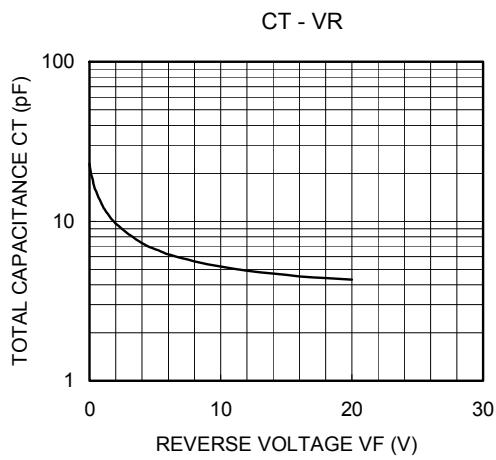
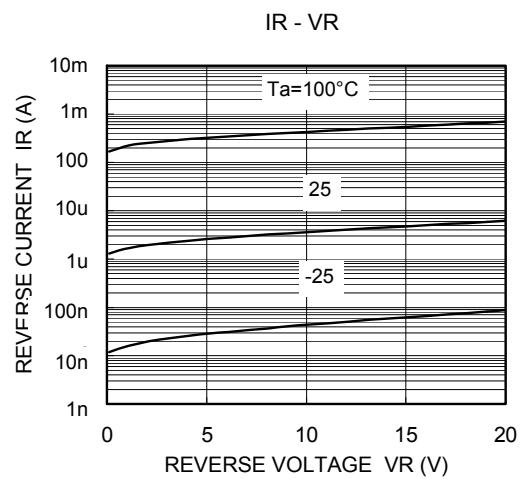
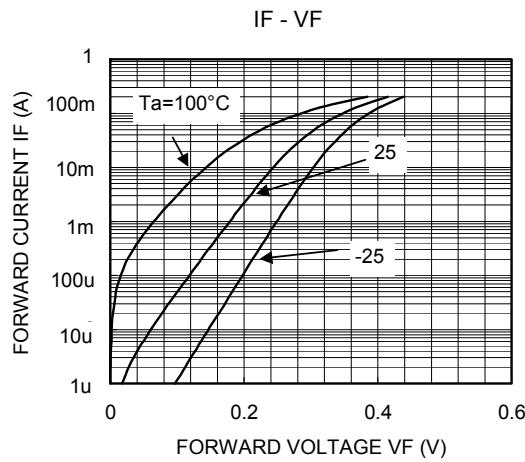
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 1$ mA	—	0.18	—	V
	$V_F(2)$	—	$I_F = 5$ mA	—	0.23	—	
	$V_F(3)$	—	$I_F = 200$ mA	—	0.42	0.5	
Reverse current	$I_R(1)$	—	$V_R = 10$ V	—	—	30	$\mu$ A
	$I_R(2)$	—	$V_R = 20$ V	—	—	50	
Total capacitance	$C_T$	—	$V_R = 0, f = 1$ MHz	—	20	—	pF

## Equivalent Circuit (Top View)



## Marking





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