

# 1SS420

## High-Speed Switching Applications

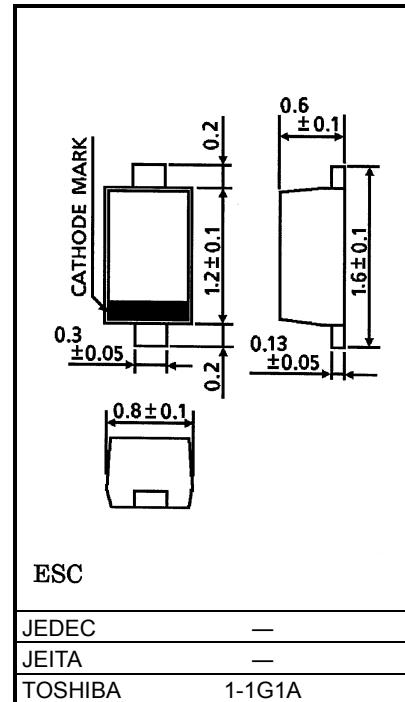
- Low reverse current:  $I_R = 5 \mu\text{A}$  (max)

## Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	35	V
Reverse voltage	$V_R$	30	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	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55~125	$^\circ\text{C}$
Operating temperature range	$T_{opr}$	-40~100	$^\circ\text{C}$

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

Unit: mm

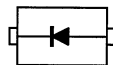


Weight: 0.0014 g (typ.)

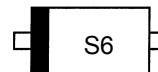
## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

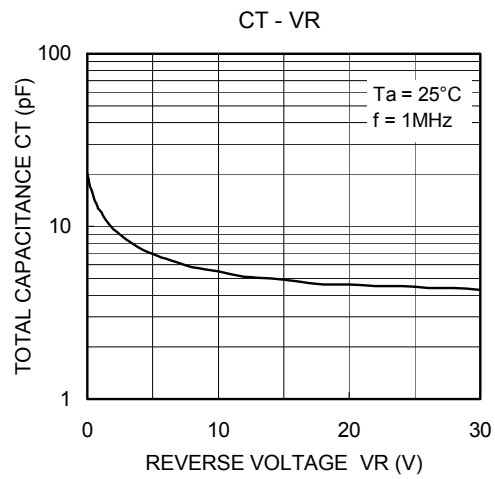
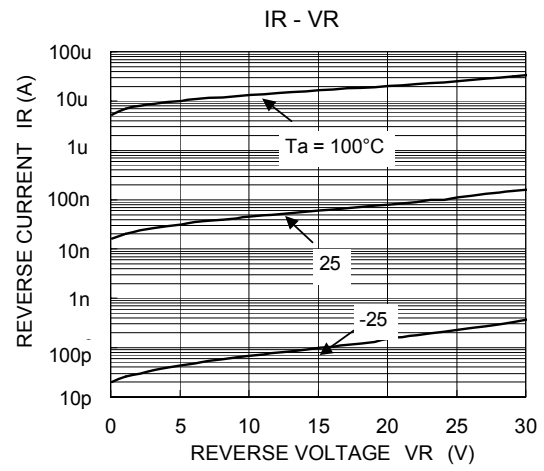
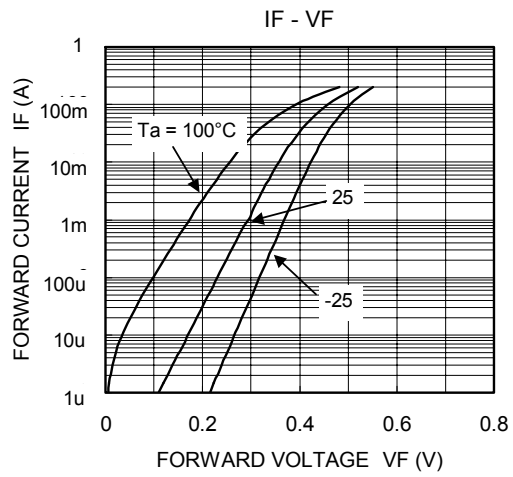
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F$ (1)	—	$I_F = 1$ mA	—	0.29	—	V
	$V_F$ (2)	—	$I_F = 10$ mA	—	0.36	—	
	$V_F$ (3)	—	$I_F = 200$ mA	—	0.52	0.6	
Reverse current	$I_R$	—	$V_R = 30$ V	—	—	5	$\mu\text{A}$
Total capacitance	$C_T$	—	$V_R = 0$ , $f = 1$ MHz	—	20	—	pF

## Equivalent Circuit (Top View)



## Marking





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