

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# 1SS417

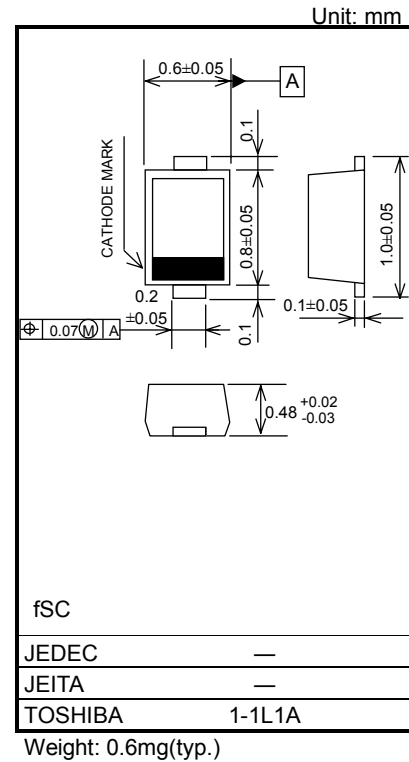
## High Speed Switching Application

- Small package
- Low forward voltage:  $V_F(3) = 0.56V$  (typ.)
- Low reverse current:  $I_R = 5\mu A$  (Max.)

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

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	$I_O$	100	mA
Surge current (10ms)	$I_{FSM}$	1	A
Power dissipation	$P^*$	100	mW
Junction temperature	$T_j$	125	$^\circ C$
Storage temperature range	$T_{stg}$	-55~125	$^\circ C$
Operating temperature range	$T_{opr}$	-40~100	$^\circ C$

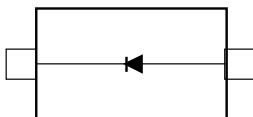
\* Mounted on a glass epoxy circuit board of 20 × 20 mm, pad dimension of 4 × 4 mm.



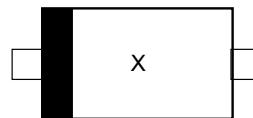
## Electrical Characteristics ( $T_a = 25^\circ C$ )

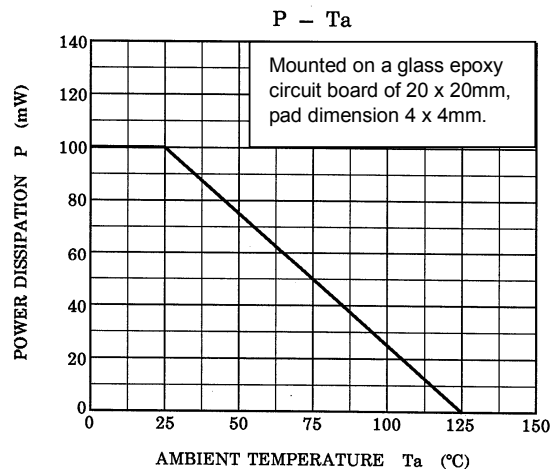
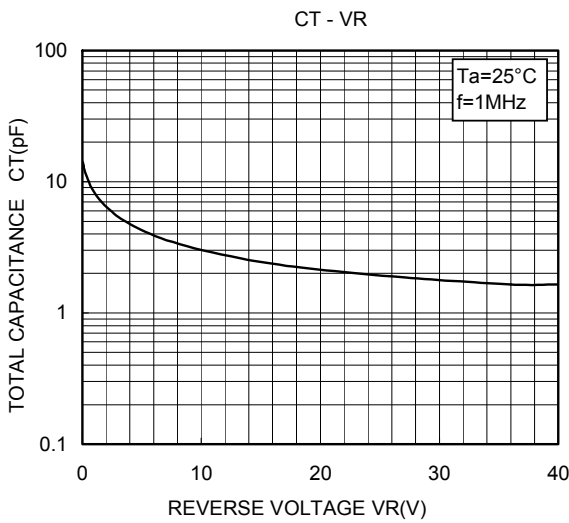
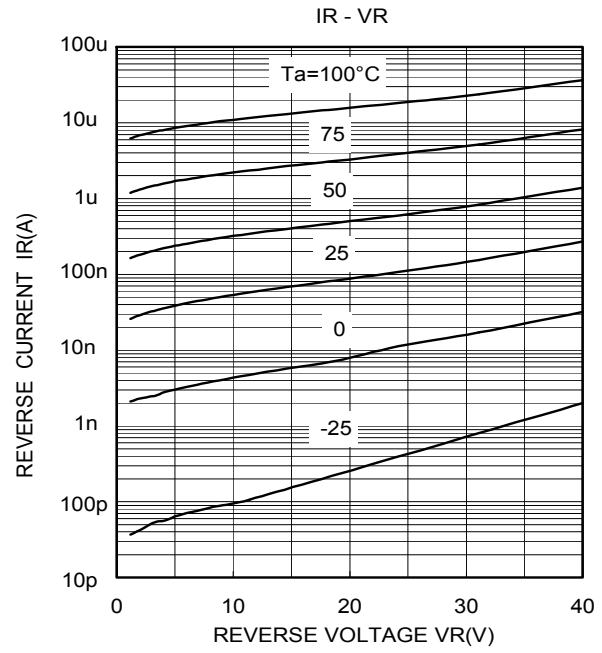
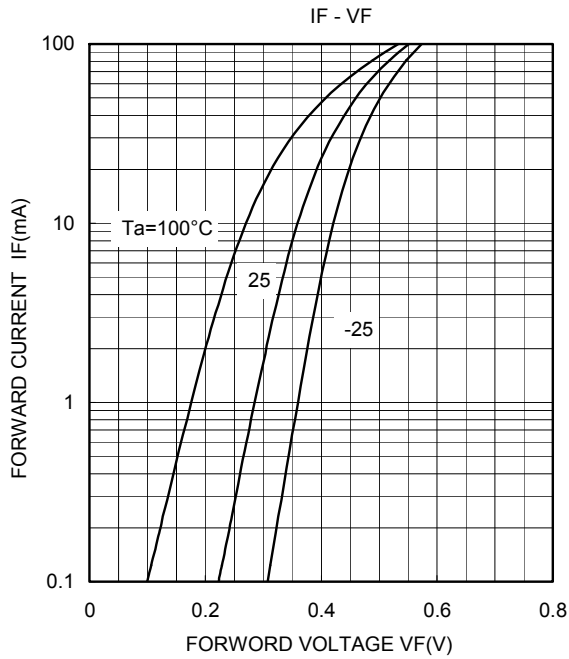
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 1mA$	—	0.28	—	V
	$V_F(2)$	—	$I_F = 10mA$	—	0.36	—	
	$V_F(3)$	—	$I_F = 50mA$	—	0.56	0.62	
Reverse current	$I_R$	—	$V_R = 40V$	—	—	5	$\mu A$
Total capacitance	$C_T$	—	$V_R = 0, f = 1MHz$	—	15	—	pF

## Equivalent Circuit (Top View)



## Marking





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