

TOSHIBA Diode Silicon Epitaxial Planar Type

**1SS352**

## Ultra High Speed Switching Application

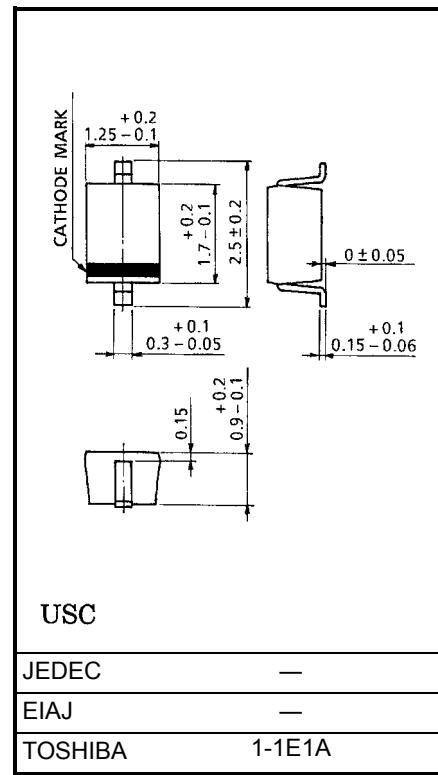
Unit: mm

- Small package
- Low forward voltage :  $V_F(3) = 0.98V$  (typ.)
- Fast reverse recovery time:  $t_{rr} = 1.6ns$  (typ.)
- Small total capacitance :  $C_T = 0.5pF$  (typ.)

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	85	V
Reverse voltage	$V_R$	80	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	200 (*)	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55~125	°C

(\*) Mounted on a glass epoxy circuit board of  $20 \times 20\text{mm}$ ,  
pad dimension of  $4 \times 4\text{mm}$ .



Weight: 0.004g

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

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 1\text{mA}$	—	0.62	—	V
	$V_F(2)$	—	$I_F = 10\text{mA}$	—	0.75	—	
	$V_F(3)$	—	$I_F = 100\text{mA}$	—	0.98	1.20	
Reverse current	$I_R(1)$	—	$V_R = 30\text{V}$	—	—	0.1	$\mu\text{A}$
	$I_R(2)$	—	$V_R = 80\text{V}$	—	—	0.5	
Total capacitance	$C_T$	—	$V_R = 0, f = 1\text{MHz}$	—	0.5	3.0	pF
Reverse recovery time	$t_{rr}$	—	$I_F = 10\text{mA}$ , Fig.1	—	1.6	4.0	ns