

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

## 1SS385F

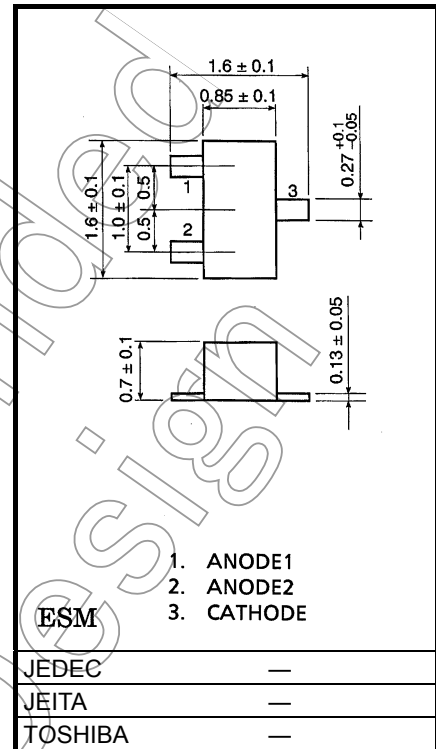
## High Speed Switching

Unit: mm

- Low forward voltage:  $V_F = 0.23V$  (typ.) @  $I_F = 5mA$
- Ultra-small package

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	$V_{RM}$	15	V
Reverse voltage	$V_R$	10	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	$^\circ C$



Weight: 2.3 g (typ.)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

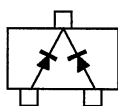
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

\*: Unit rating. Total rating = unit rating  $\times$  1.5

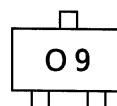
Electrical Characteristics ( $T_a = 25^\circ C$ )

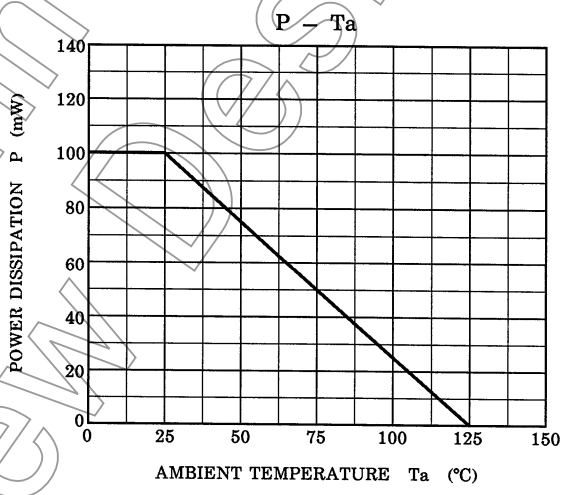
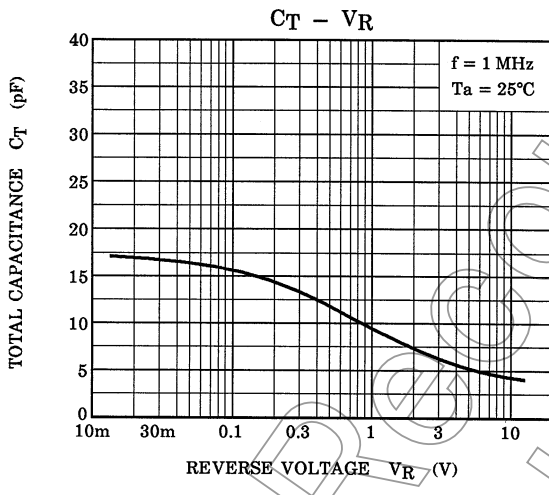
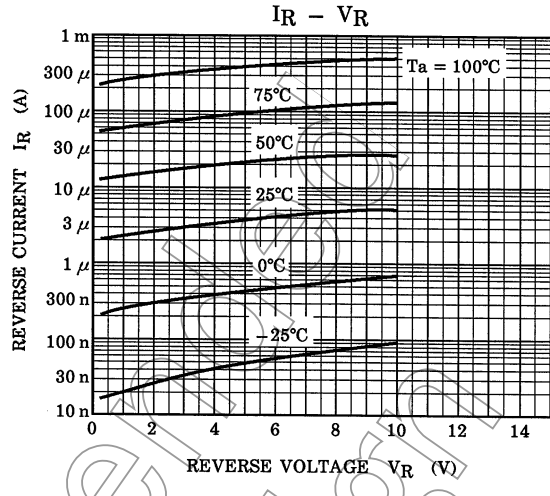
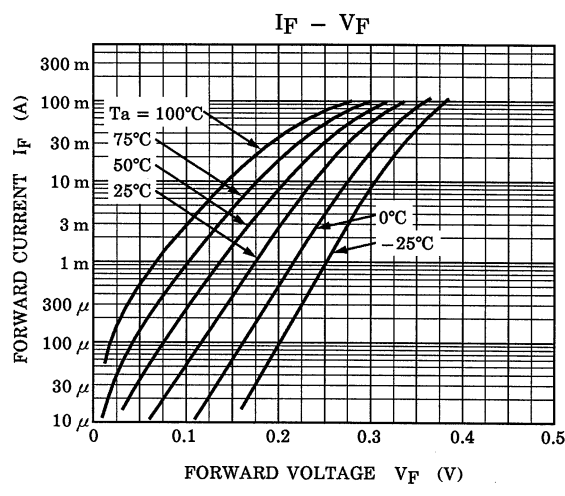
Characteristic	Symbol	Test Circuit	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$ (1)	—	$I_F = 1mA$	—	0.18	—	V
	$V_F$ (2)	—	$I_F = 5mA$	—	0.23	0.30	V
	$V_F$ (3)	—	$I_F = 100mA$	—	0.35	0.50	V
Reverse current	$I_R$	—	$V_R = 10V$	—	—	20	$\mu A$
Total capacitance	$C_T$	—	$V_R = 0, f = 1MHz$	—	20	40	pF

## Equivalent Circuit (Top View)



## Marking





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