

1SS385FV

High-Speed Switching Applications

- Low forward voltage: $V_F = 0.23 \text{ V (typ.) @ } I_F = 5 \text{ mA}$
- Ultra-small package
- Lead (Pb) - free

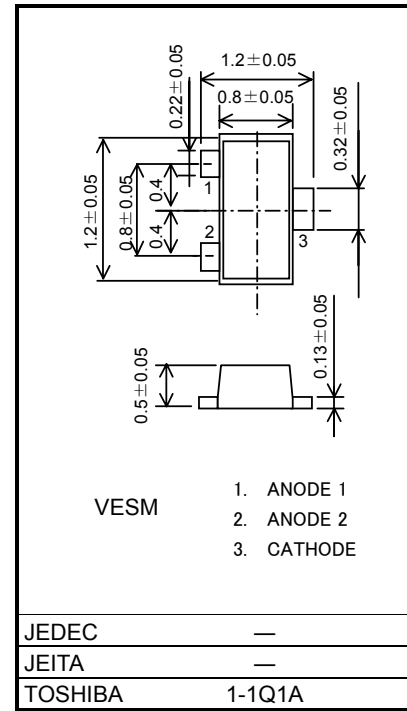
Maximum Ratings ($T_a = 25^\circ\text{C}$)

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 (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	$^\circ\text{C}$

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

** : Mounted on an FR4 board (25.4 mm \times 25.4 mm \times 1.6 mm)

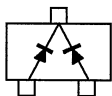
Unit: mm



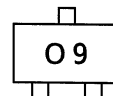
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

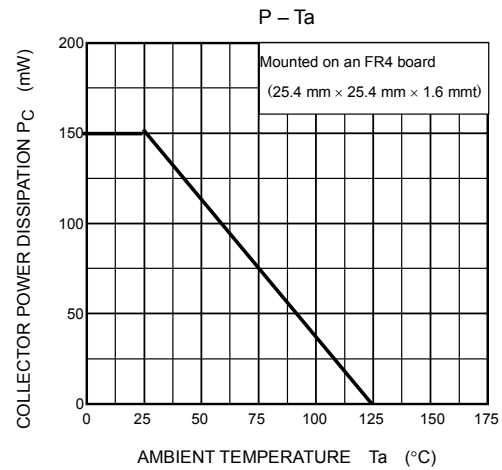
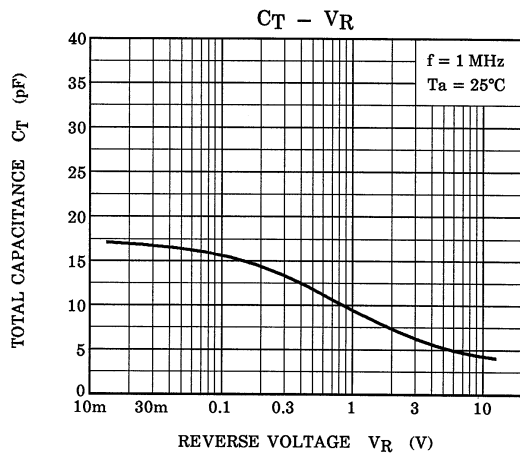
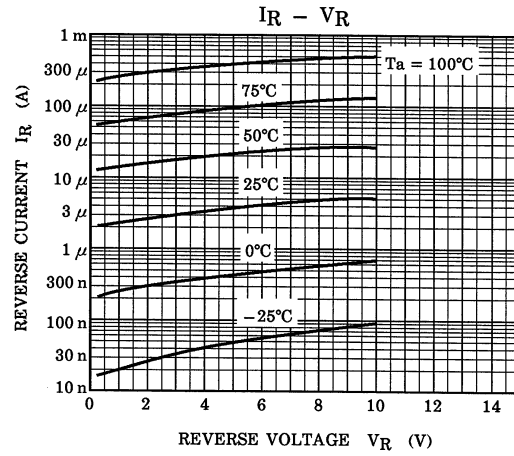
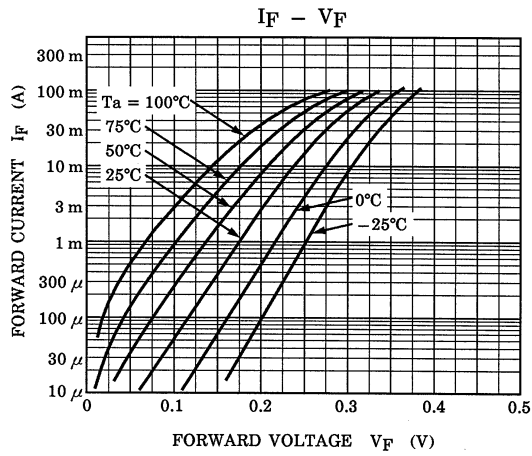
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F (1)$	—	$I_F = 1 \text{ mA}$	—	0.18	—	V
	$V_F (2)$	—	$I_F = 5 \text{ mA}$	—	0.23	0.30	V
	$V_F (3)$	—	$I_F = 100 \text{ mA}$	—	0.35	0.50	V
Reverse current	I_R	—	$V_R = 10 \text{ V}$	—	—	20	μA
Total capacitance	C_T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

Equivalent Circuit (Top View)



Marking





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