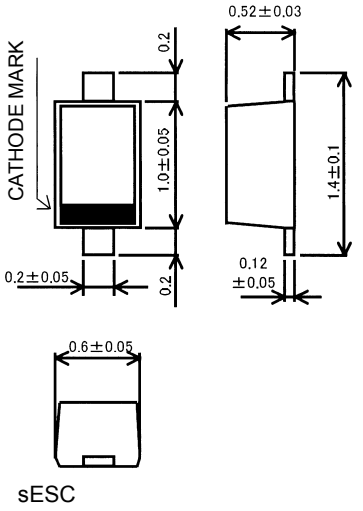
TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS419

High-Speed Switching Applications

Unit: mm

- Small package
- Low forward voltage: $V_{F\ (3)}$ = 0.56 V (typ.)
- Low reverse current: I_R = 5 μA (max)



sESC

JEDEC	—
JEITA	—
TOSHIBA	1-1K1A

Weight: 0.0011 g (typ.)

Maximum Ratings (Ta = 25°C)

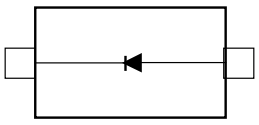
Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	45	V
Reverse voltage	V_R	40	V
Maximum (peak) forward current	I_{FM}	200	mA
Average forward current	I_O	100	mA
Surge current (10 ms)	I_{FSM}	1	A
Power dissipation	P *	100	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C
Operating temperature range	T_{opr}	−40~100	°C

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

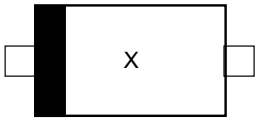
Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_{F\ (1)}$	I_F = 1 mA	—	0.28	—	V
	$V_{F\ (2)}$	I_F = 10 mA	—	0.36	—	
	$V_{F\ (3)}$	I_F = 50 mA	—	0.56	0.62	
Reverse current	I_R	V_R = 40 V	—	—	5	μA
Total capacitance	C_T	V_R = 0, f = 1 MH_z	—	15	—	pF

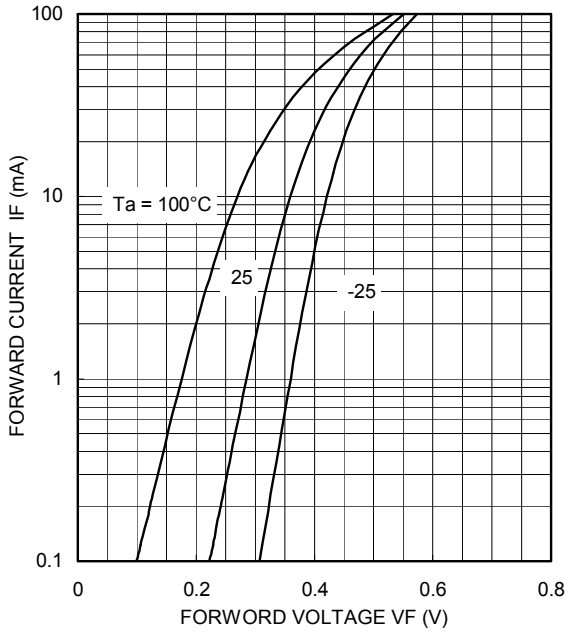
Equivalent Circuit (Top View)



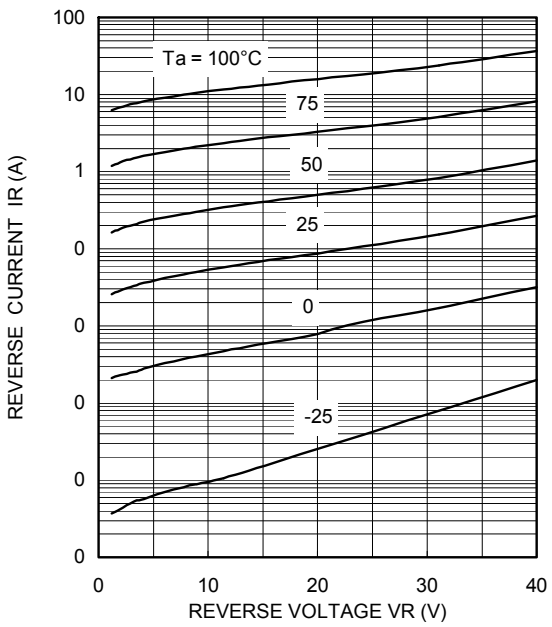
Marking



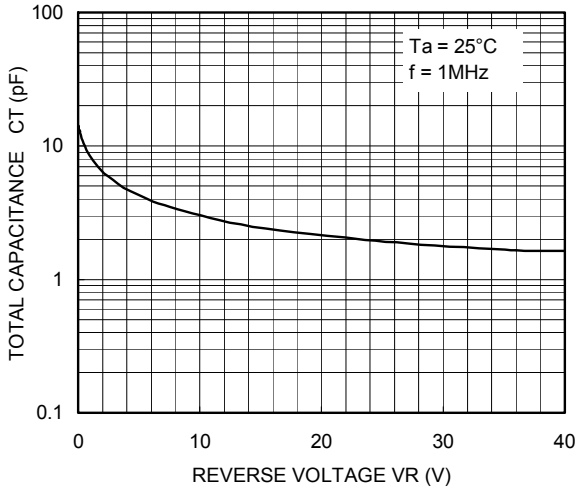
IF - VF



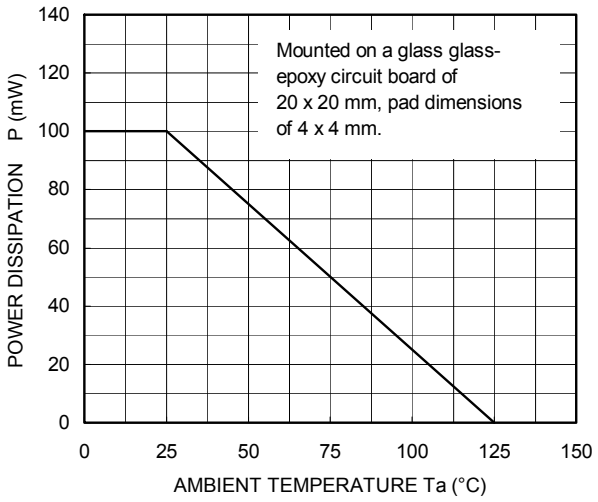
IR - VR



CT - VR



P - Ta



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