

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS394

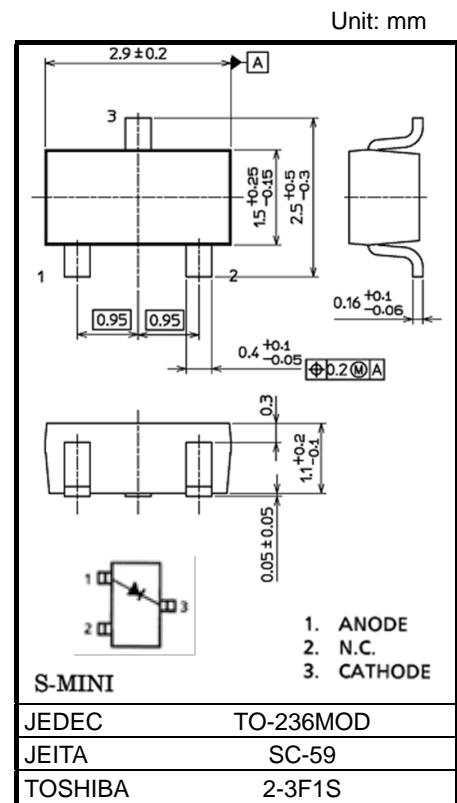
High Speed Switching Application

- AEC-Q101 Qualified (Note1)
- Small package : SC-59
- Low forward voltage : VF(2) = 0.23V (typ.)

Note1: For detail information, please contact to our sales.

Absolute Maximum Ratings (Ta = 25°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	150	mW
Junction temperature	T _j	125	°C
Storage temperature range	T _{stg}	-55 to 125	°C
Operating temperature range	T _{opr}	-40 to 100	°C



Weight: 12 mg (typ.)

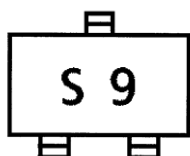
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.)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

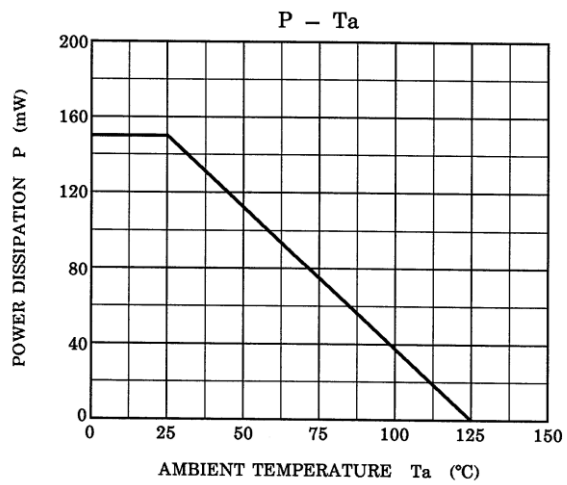
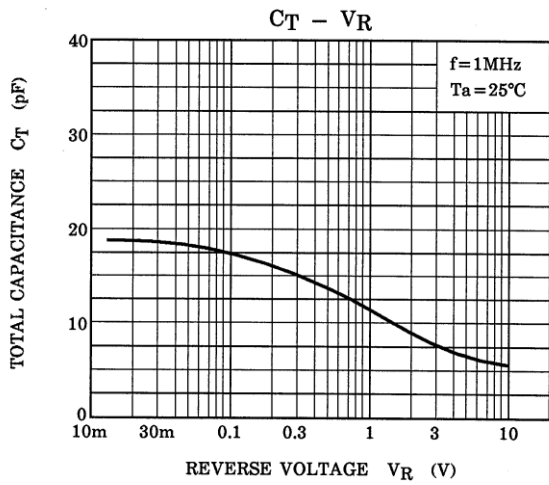
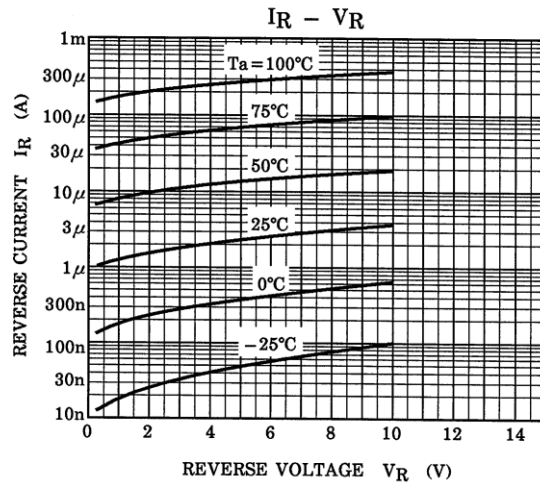
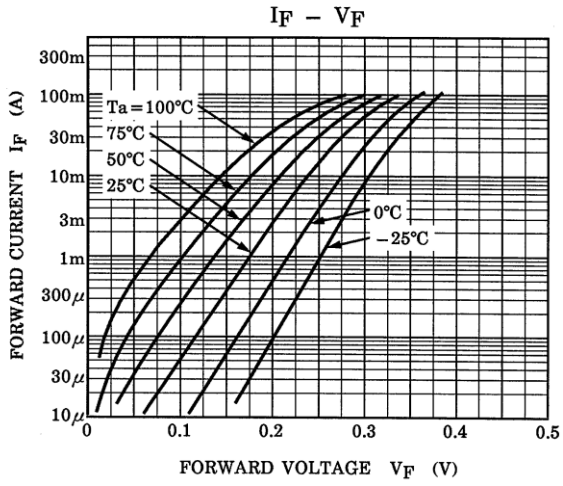
Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	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 _F (3)	I _F = 100mA	—	0.35	0.50	
Reverse current	I _R	V _R = 10V	—	—	20	μA
Total capacitance	C _T	V _R = 0V, f = 1MHz	—	20	40	pF

Marking



Start of commercial production
1996-04



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