

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS294

Unit: mm

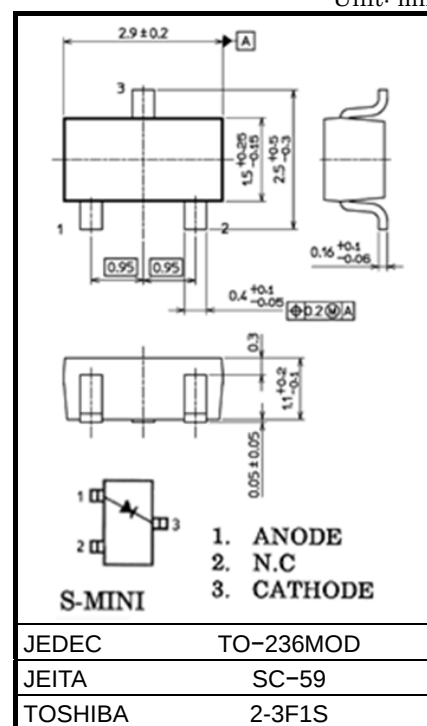
Low Voltage High Speed Switching

- AEC-Q101 Qualified (Note1)
- Low forward voltage : $V_F (3) = 0.54V$ (typ.)
- Low reverse current : $I_R = 5\mu A$ (max)
- Small package : SC-59

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

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

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	45	V
Reverse voltage	V_R	40	V
Maximum (peak) forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Power dissipation	P	150	mW
Junction temperature	T_j	125	$^\circ C$
Storage temperature range	T_{stg}	-55 to 125	$^\circ C$



Weight: 12 mg (typ.)

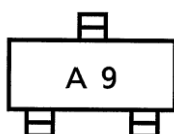
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.)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

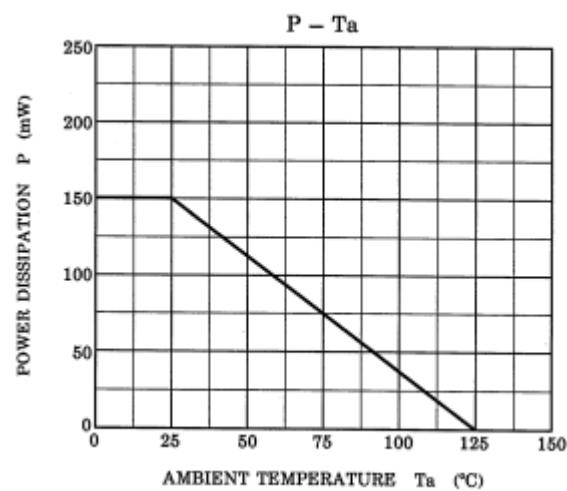
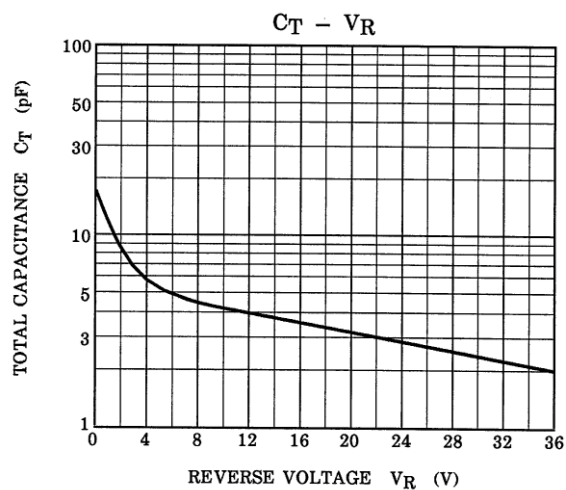
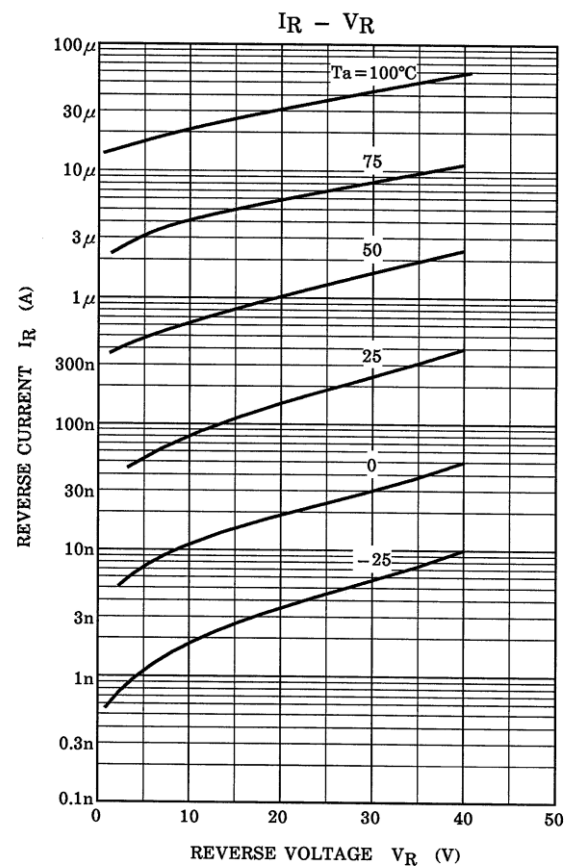
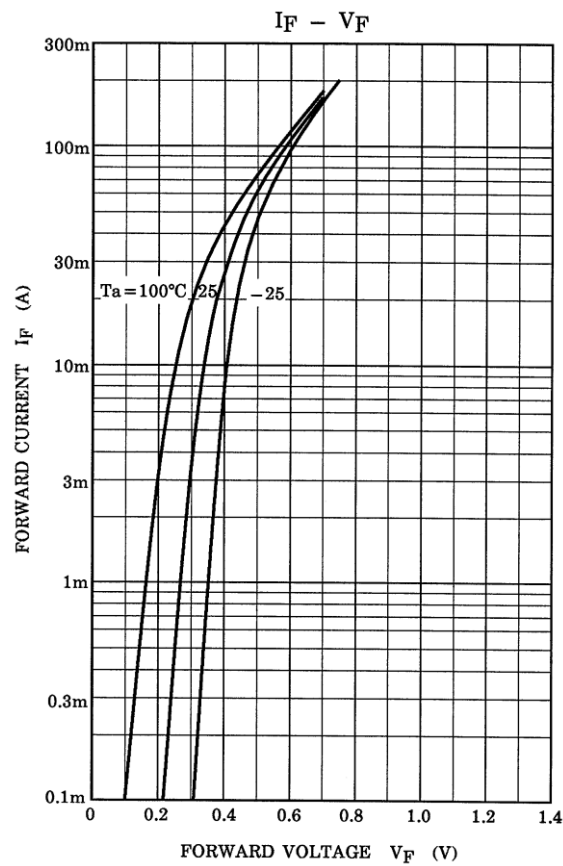
Electrical Characteristics ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F (1)$	$I_F = 1mA$	—	0.28	—	V
	$V_F (2)$	$I_F = 10mA$	—	0.36	—	
	$V_F (3)$	$I_F = 100mA$	—	0.54	0.60	
Reverse current	I_R	$V_R = 40V$	—	—	5	μA
Total capacitance	C_T	$V_R = 0 V, f = 1MHz$	—	18	25	pF

Marking



Start of commercial production
1986-03



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