

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS379

General Purpose Rectifier Applications

- Small package : SC-59
- Low forward voltage : $V_F = 1.0V$ (typ.)
- Low reverse current : $I_R = 0.1nA$ (typ.)
- Small total capacitance : $C_T = 3.0pF$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

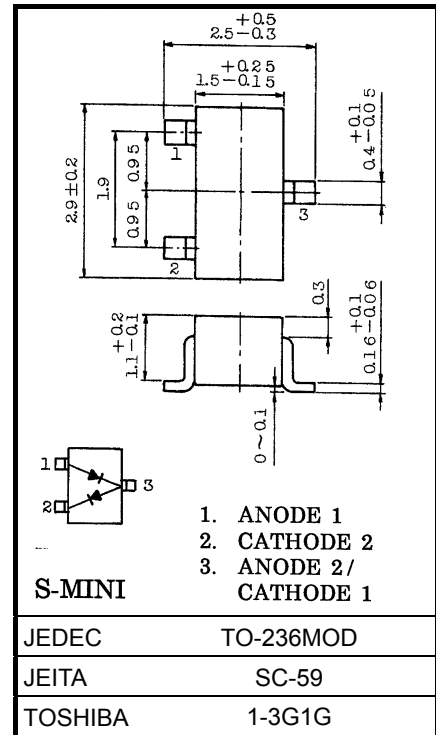
Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Maximum (peak) forward current	I_{FM}	300 *	mA
Average forward current	I_O	100 *	mA
Surge current (10ms)	I_{FSM}	2 *	A
Power dissipation	P	150	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55 to 125	°C

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 × 0.7

Unit: mm



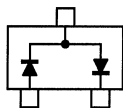
Weight: 0.012g (typ.)

Start of commercial production
1994-01

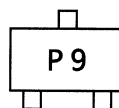
Electrical Characteristics (Ta = 25°C)

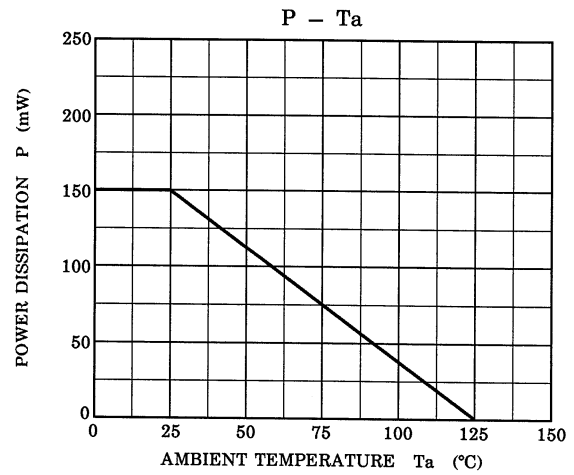
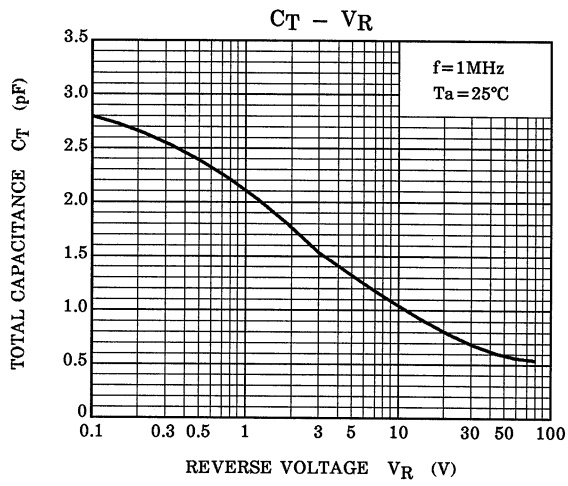
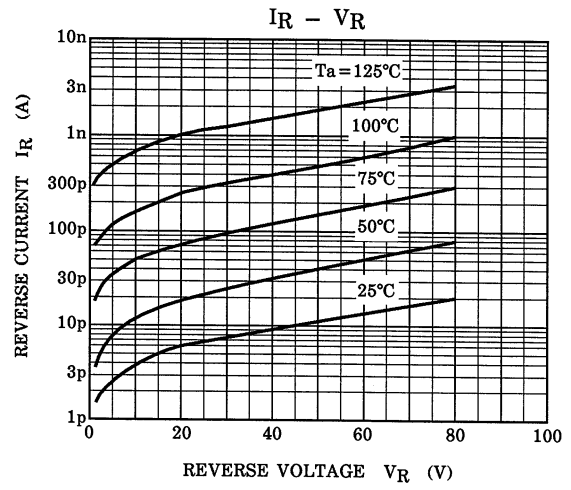
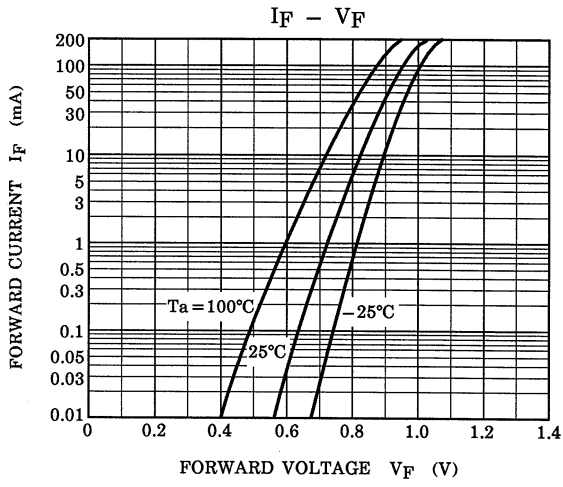
Characteristic	Symbol	Test Circuit	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	—	$I_F = 100\text{mA}$	—	1.0	1.3	V
Reverse current	I_R	—	$V_R = 80\text{V}$	—	0.1	10	nA
Total capacitance	C_T	—	$V_R = 0, f = 1\text{MHz}$	—	3.0	6.0	pF

Equivalent Circuit (Top View)



Marking





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