

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS307

General Purpose Rectifier Applications

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

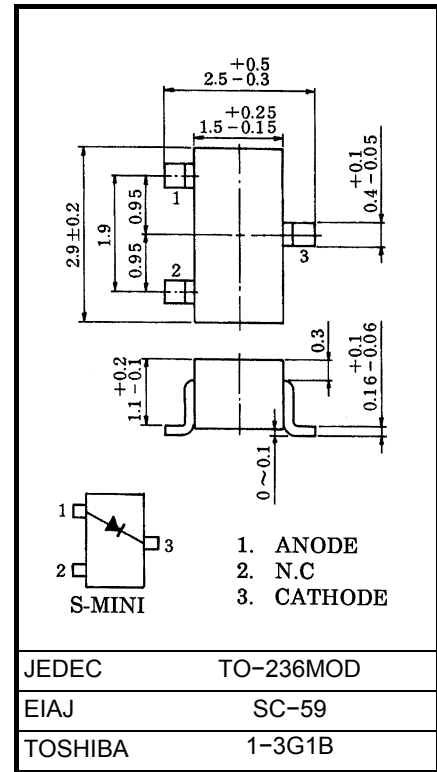
Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	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	T_{stg}	-55-125	°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: mm

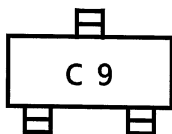


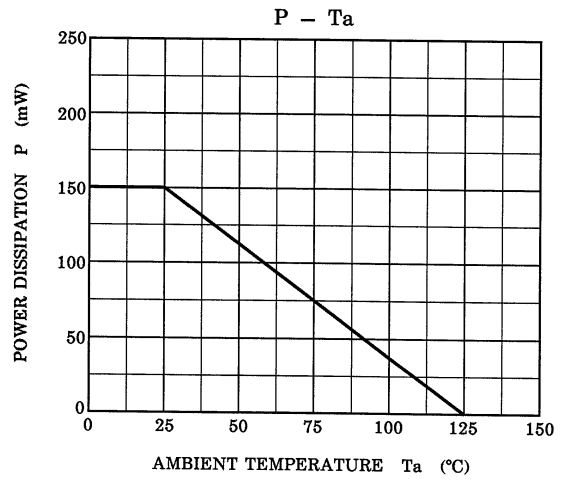
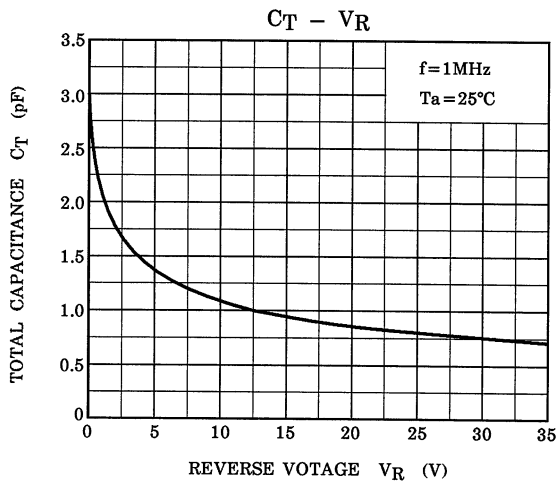
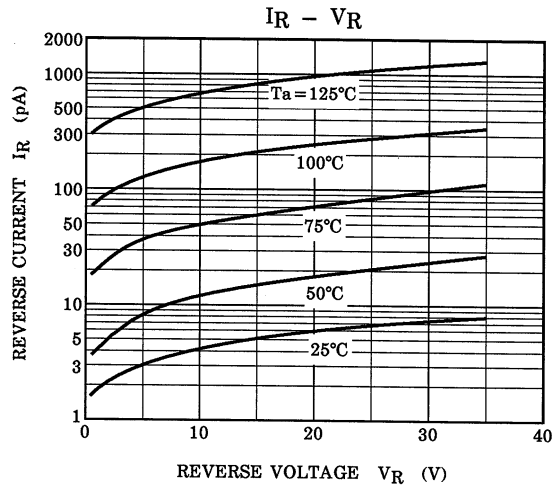
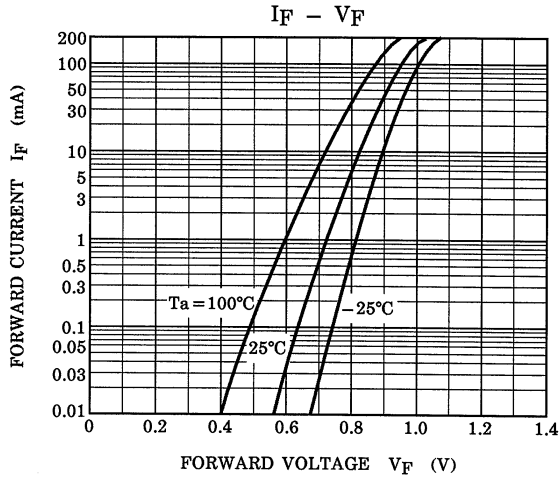
Weight: 0.012g(typ.)

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F	—	$I_F = 10mA$	—	1.0	1.3	V
Reverse current	I_R	—	$V_R = 30V$	—	—	10	μA
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	3.0	6.0	pF

Marking





RESTRICTIONS ON PRODUCT USE

20070701-EN GENERAL

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