

TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS315

UHF Band Mixer Applications

Unit: mm

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	5	V
Forward current	I_F	30	mA
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.).

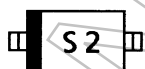
JEDEC	—
JEITA	—
TOSHIBA	1-1E1A

Weight: 0.004 g (typ.)

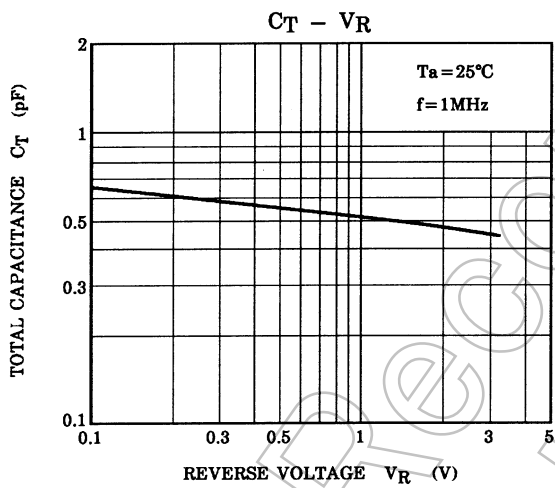
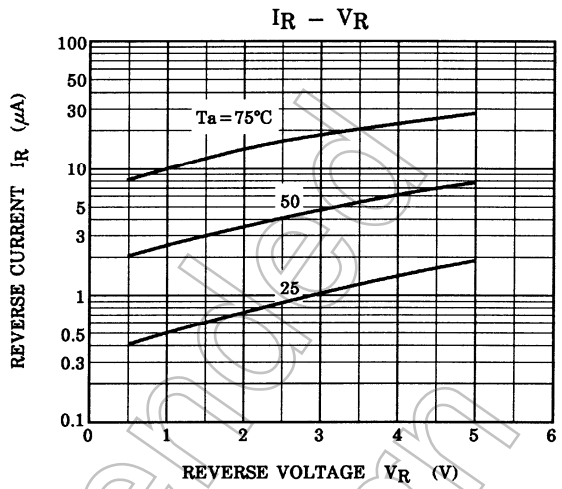
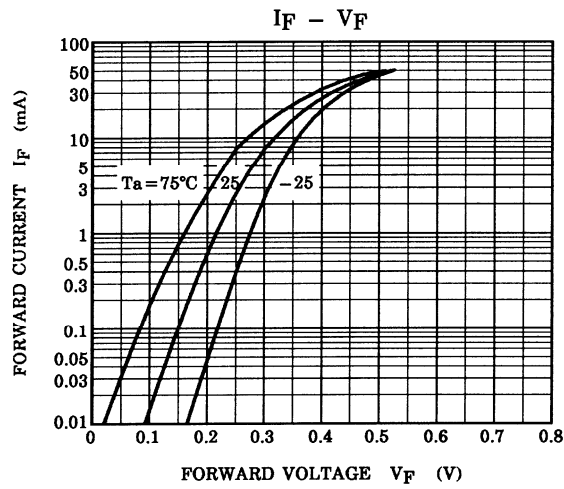
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F	$I_F = 2 \text{ mA}$	—	0.25	—	V
Forward current	I_F	$V_F = 0.5 \text{ V}$	30	—	—	mA
Reverse current	I_R	$V_R = 0.5 \text{ V}$	—	—	25	μA
Total capacitance	C_T	$V_R = 0.2 \text{ V}, f = 1 \text{ MHz}$	—	0.6	—	pF

Marking



Start of commercial production
1987-05



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