TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS396

Low Voltage High Speed Switching

• Small package : SC-59

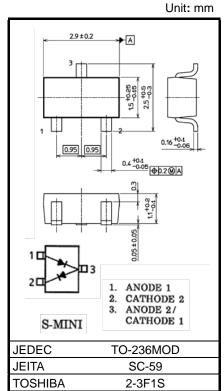
Low forward voltage :
$$V_{F(3)} = 0.54V$$
 (typ.)

• Low reverse current $: I_R = 5\mu A (max.)$

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit	
Maximum (peak) reverse Voltage	Vrm	45	V	
Reverse voltage	VR	40	V	
Maximum (peak) forward current	IFM	300 *	mA	
Average forward current	lo	100 *	mA	
Surge current (10ms)	IFSM	1 *	А	
Power dissipation	Р	150	mW	
Junction temperature	Тј	125	°C	
Storage temperature range	T _{stg}	-55 to 125	°C	
Operating temperature range	T _{opr}	-40 to 100	°C	

Note: Using continuously under heavy loads (e.g. the application of high



Weight: 12 mg (typ.)

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

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Forward voltage	VF (1)	IF = 1mA	_	0.28	_	
	VF (2)	I _F = 10mA	_	0.36	_	V
	VF (3)	I _F = 100mA	_	0.54	0.60	
Reverse current	I _R	V _R = 40V	_	_	5	μA
Total capacitance	CT	$V_R = 0 V$, f = 1MH _z		18	25	pF

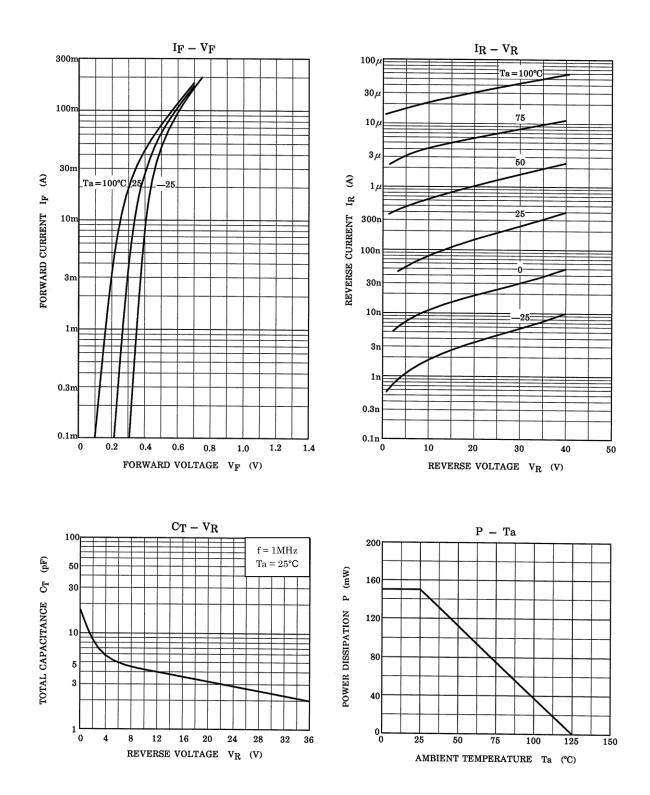
Marking



Start of commercial production 1996-04

Downloaded from Arrow.com.

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