TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

1SS357

Low Voltage High Speed Switching

• Low forward voltage $: V_F(3) = 0.54V \text{ (typ.)}$ • Low reverse current $: I_R = 5\mu\text{A (max)}$

• Small package : SC-70

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	45	V
Reverse voltage	V _R	40	٧
Maximum (peak) forward current	I _{FM}	300	mA
Average forward current	Io	100	mA
Surge current (10ms)	I _{FSM}	1	Α
Power dissipation	Р	200*	mW
Junction temperature	Tj	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.

JEDEC —

JEITA —

TOSHIBA 1-1E1A

Weight: 0.004g (typ.)

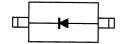
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

* Mounted on a glass epoxy circuit board of 20 × 20mm, pad dimension of 4 × 4mm.

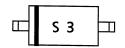
Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V _{F (1)}	_	I _F = 1mA	_	0.28	_		
	V _{F (2)}	_	I _F = 10mA	_	0.36	_	٧	
	V _{F (3)}	_	I _F = 100mA	_	0.54	0.60		
Reverse current	I _{R (1)}	_	V _R = 40V	_	_	5	μA	
Total capacitance	C _T	_	V _R = 0, f = 1MH _z	_	18	25	pF	

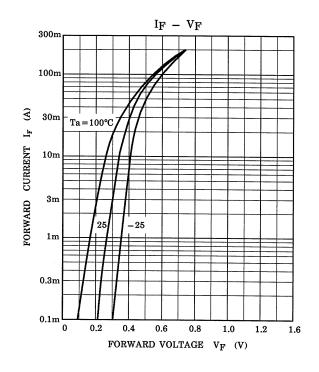
Pin Assignment (Top View)

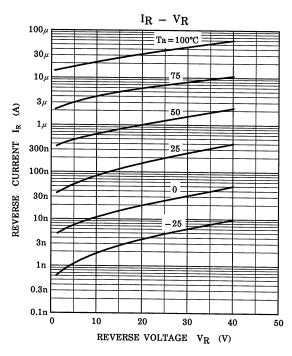


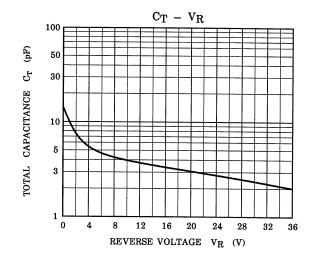
Marking



Start of commercial production 1990-01







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