TOSHIBA Diode Silicon Epitaxial Planar Diode

1SS399

High Voltage, High Speed Switching Applications

• Small package : SC-61

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse Voltage	V_{RM}	420	V
Reverse voltage	V _R	400	V
Maximum (peak) forward current	I _{FM}	300 *	mA
Average forward current	Io	100 *	mA
Surge current (10ms)	I _{FSM}	2 *	Α
Power dissipation	Р	150 *	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C

^{* :} Unit rating. Total rating = unit rating \times 1.5

Weight: 0.013g

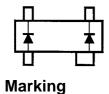
Electrical Characteristics (Ta = 25°C)

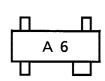
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V _{F (1)}	_	I _F = 10mA	_	0.8	_	V
	V _{F (2)}	_	I _F = 100mA	_	1.0	1.3	
Reverse current	I _{R (1)}	_	V _R = 300V	1	_	0.1	μΑ
	I _{R (2)}	_	V _R = 400V	_	_	1.0	
Total capacitance	C _T	_	$V_R = 0$, $f = 1MH_Z$	_	2.5	5.0	pF
Reverse recovery time	t _{rr}	_	$I_F = 10\text{mA}$ (Fig.1)	_	0.5	_	μs

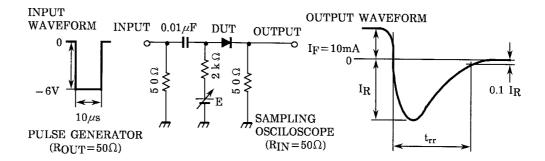
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Equivalent Circuit (Top View)

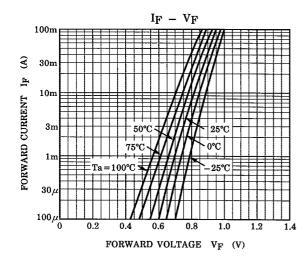
Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit

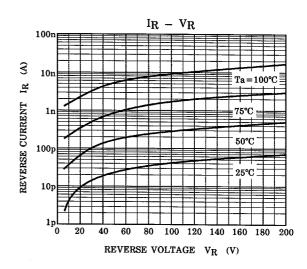


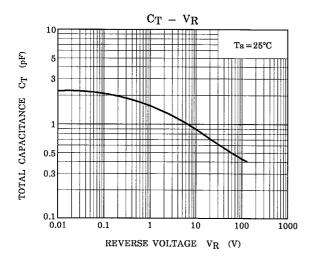


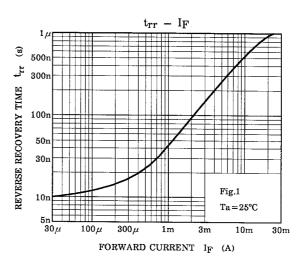


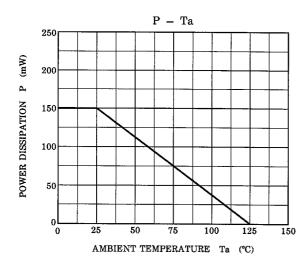
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