TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

155309

ULTRA HIGH SPEED SWITCHING APPLICATIONS.

• Small Package : SC-74A

• Low Forward Voltage : V_{F(3)}=0.90V (Typ.)

• Fast Reverse Recovery Time : $t_{rr} = 1.6ns$ (Typ.)

• Small Total Capacitance : C_T=0.9pF (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Maximum (Peak) Reverse Voltage	$v_{ m RM}$	85	V	
Reverse Voltage	$V_{\mathbf{R}}$	80	V	
Maximum (Peak) Forward Current	$I_{ extbf{FM}}$	300 (*)	mA	
Average Forward Current	IO	100 (*)	mA	
Surge Current (10ms)	I_{FSM}	2 (*)	Α	
Power Dissipation	P	200	mW	
Junction Temperature	$T_{ m j}$	125	$^{\circ}\mathrm{C}$	
Storage Temperature	T _{stg} -55~125		°C	

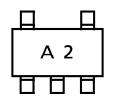
Weight: 0.014g

(*) Unit Rating. Total Rating=Unit Rating×1.5

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	I _F =1mA	_	0.60	_	v
	$V_{F(2)}$	$I_{ m F}$ = 10mA	_	0.72	_	
	$V_{F(3)}$	$I_{ m F}$ = 100mA		0.90	1.20	
Reverse Current	I _{R (1)}	$V_R = 30V$	_	_	0.1	μ A
	I _{R (2)}	$V_R = 80V$	_	_	0.5	
Total Capacitance	$C_{\mathbf{T}}$	$V_R=0$, f=1MHz	_	0.9	3.0	pF
Reverse Recovery Time	trr	I _F =10mA, Fig.1		1.6	4.0	ns

MARKING



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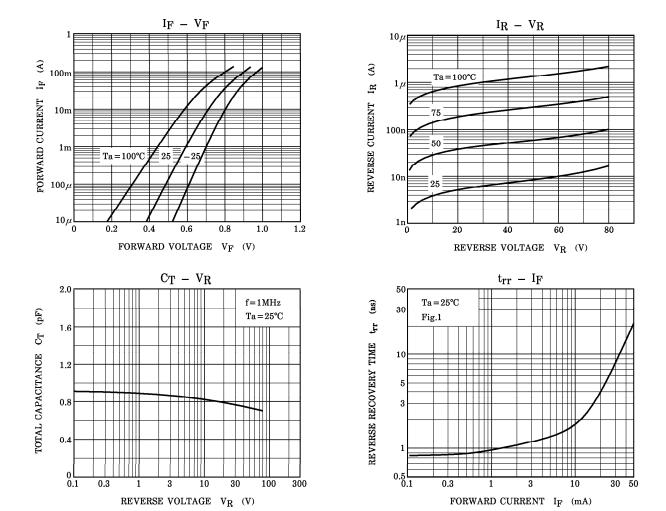
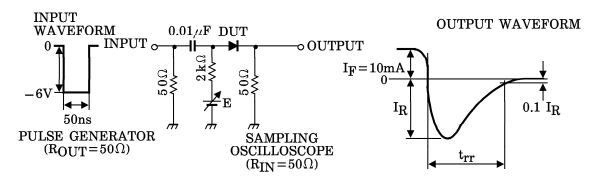


Fig.1 REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT



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