TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

155336

ULTRA HIGH SPEED SWITCHING APPLICATION.

• Small Package : SC-59

Low Forward Voltage : V_{F(3)} = 0.84V (Typ.)

• Fast Reverse Recovery Time : $t_{rr} = 7 ns (Typ.)$

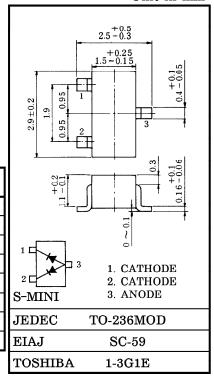
• Small Total Capacitance : C_T=7pF (Typ.)

MAXIMUM RATINGS ($Ta = 25^{\circ}C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Maximum (Peak) Reverse Voltage	v_{RM}	85	V	
Reverse Voltage	$V_{\mathbf{R}}$	80	V	
Maximum (Peak) Forward Current	I_{FM}	600*	mA	
Average Forward Current	IO	200*	mA	
Surge Current (10ms)	I_{FSM}	6*	Α	
Power Dissipation	P	150	mW	
Junction Temperature	Tj	150	°C	
Storage Temperature	$\mathrm{T_{stg}}$	-55~150	°C	

^{*} Unit Rating. Total Rating=Unit Rating $\times 1.5$

Unit in mm

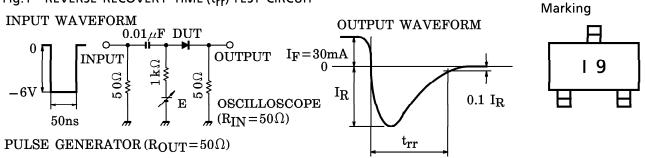


Weight: 0.012g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

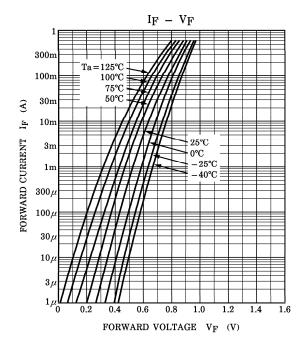
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	$I_{ m F}$ = 10mA	_	0.64	_	V
	$V_{F(2)}$	$I_{ m F}$ = 100mA	_	0.78	_	
	$V_{\mathrm{F(3)}}$	$I_{ m F}$ =200mA	_	0.84	1.2	
Reverse Current	$I_{R(1)}$	$V_R=30V$	1	_	0.25	μ A
	$I_{R(2)}$	$V_R = 80V$	_	_	0.50	
Total Capacitance	$\mathrm{c_{T}}$	$V_R=0$, f=1MHz	_	7	_	pF
Reverse Recovery Time	t _{rr}	I _F =30mA, Fig.1		7	20	ns

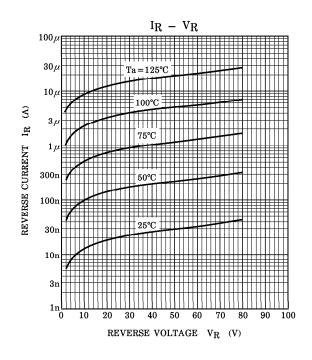
Fig.1 REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT

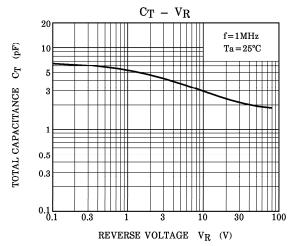


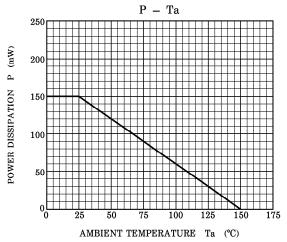
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