

SEMICONDUCTOR TECHNICAL DATA

KDS226

SILICON EPITAXIAL PLANAR DIODE

ULTRA HIGH SPEED SWITCHING APPLICATION.

FEATURES

· Small Package : SOT-23.

· Low Forward Voltag : V_F =0.9V(Typ.).

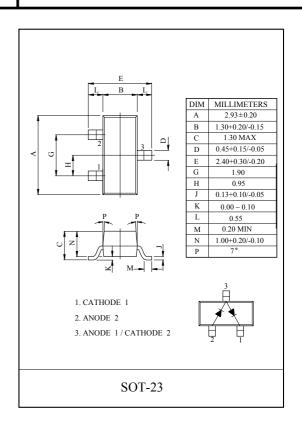
 \cdot Fast Reverse Recovery Time : t_{rr} =1.6ns(Typ.).

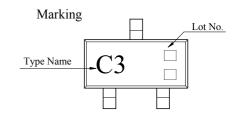
· Small Total Capacitance : C_T=0.9pF(Typ.).

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Maximum (Peak) Reverse Voltage	V _{RM}	85	V	
Reverse Voltage	V _R	80	V	
Maximum (Peak) Forward Current	I_{FM}	300 *	mA	
Average Forward Current	I _O	100 *	mA	
Surge Current (10ms)	I _{FSM}	2 *	A	
Power Dissipation	P_{D}	150	mW	
Junction Temperature	T _j	150	$^{\circ}$ C	
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}\!\mathbb{C}$	

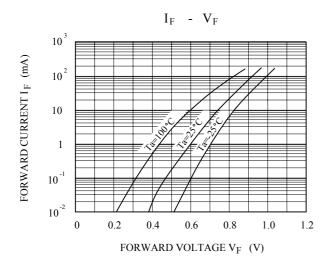
Note: *Unit Rating. Total Rating=Unit Rating x 0.7

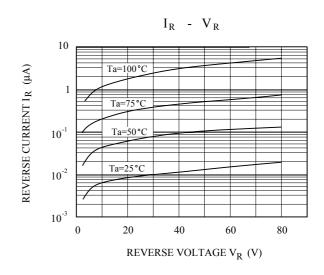


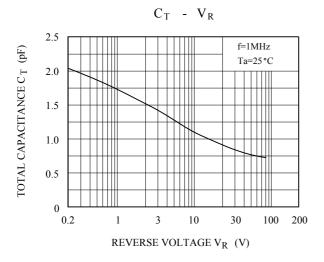


ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	I _F =1mA	-	0.60	-	
	$V_{F(2)}$	I _F =10mA	-	0.72	-	V
	V _{F(3)}	I _F =100mA	-	0.90	1.20	
Reverse Current	I_R	$V_R=80V$	-	-	0.5	μΑ
Total Capacitance	C_{T}	$V_R=0$, $f=1MHz$	-	0.9	3.0	pF
Reverse Recovery Time	t _{rr}	I _F =10mA	-	1.6	4.0	nS







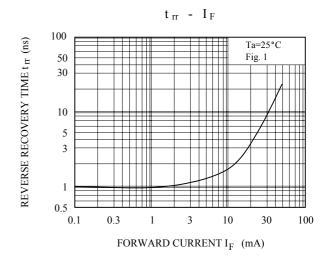
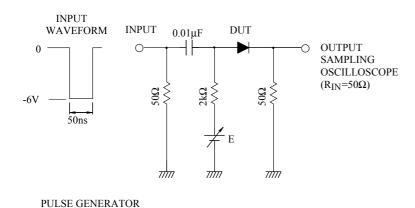
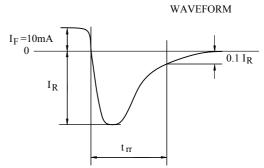


Fig. 1. REVERSE RECOVERY TIME($t_{\Gamma\Gamma}$) TEST CIRCUIT



 $(R_{\mbox{OUT}}=50\Omega)$



2/2