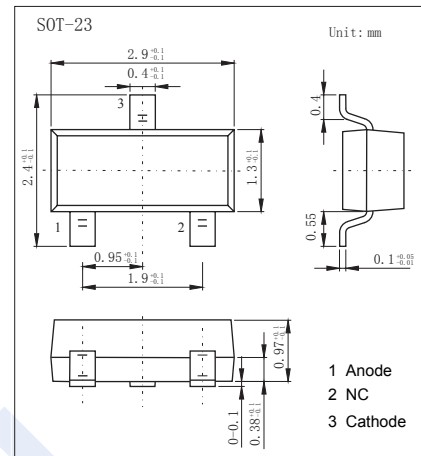
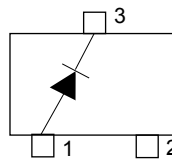


Switching Diodes

HSM83 (KSM83)

■ Features

- High reverse voltage. ($V_R = 250V$)
- Silicon Epitaxial Planar Diode for High Voltage Switching

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	V_{RM}	300	V
DC Blocking Voltage	V_R	250	
Average Rectified Output Current	I_o	100	mA
Peak Forward Surge Current	I_{FM}	300	
Non-Repetitive Peak Forward Surge Current (Note.1)	I_{FSM}	2	A
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 125	

Note.1: Value at duration of 10msec.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100\text{ }\mu\text{A}$	300			V
Forward voltage	V_F	$I_F = 100\text{ mA}$			1.2	
Reverse voltage leakage current	I_{R1}	$V_R = 250\text{ V}$			0.2	μA
	I_{R2}	$V_R = 300\text{ V}$			100	
Capacitance between terminals	C_T	$V_R = 0\text{ V}, f = 1\text{ MHz}$		1.5	3	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 30\text{ mA}, I_{rr} = 3\text{ mA}, R_L = 100\Omega$			100	ns

■ Marking

Marking	F7
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Switching Diodes

HSM83 (KSM83)

■ Typical Characteristics

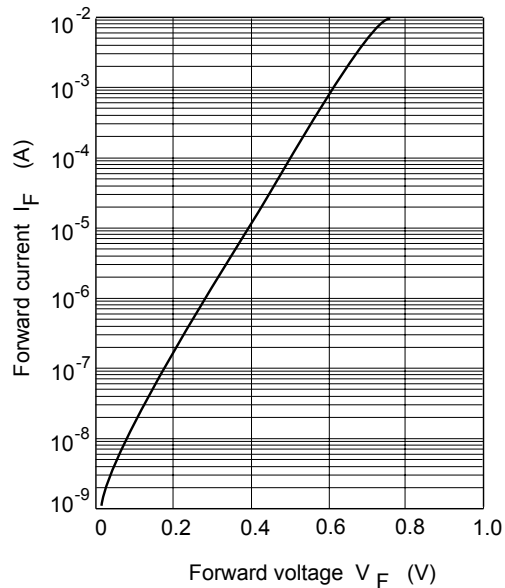


Fig.1 Forward current Vs. Forward voltage

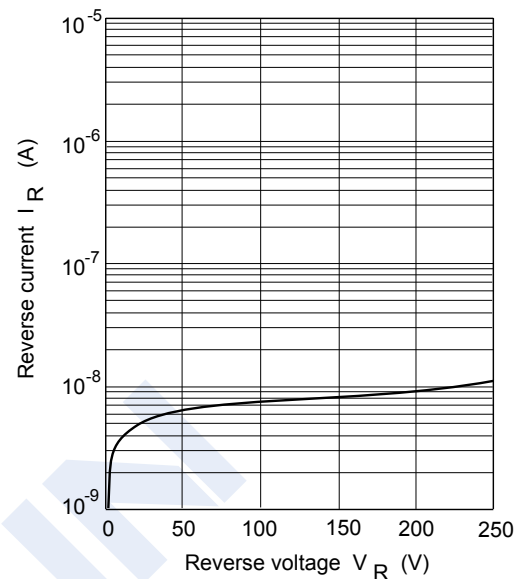


Fig.2 Reverse current Vs. Reverse voltage

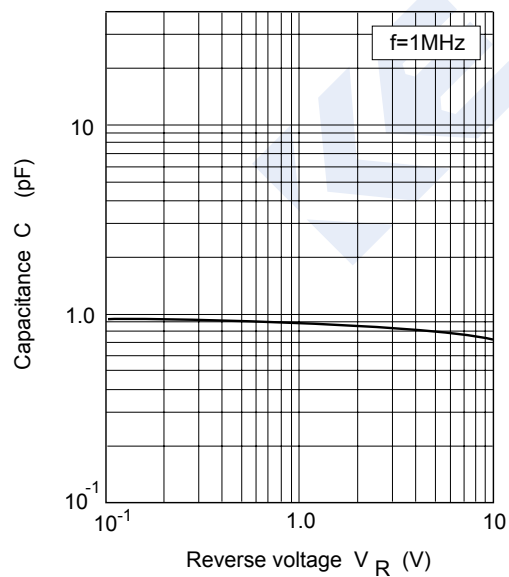


Fig.3 Capacitance Vs. Reverse voltage