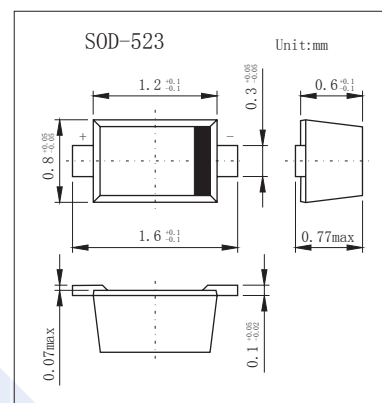


High Speed Switching Diodes

HSC119 (KSC119)

■ Features

- Low capacitance. ($C = 2.0 \text{ pF max}$)
- Short reverse recovery time. ($t_{rr} = 3.0 \text{ ns max}$)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_{RM}	85	V
Forward current	I_F	100	mA
Peak forward surge current	I_{FM}	300	
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 125	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \text{ uA}$	85			V
Forward voltage	V_{F1}	$I_F = 10 \text{ mA}$			0.8	
	V_{F2}	$I_F = 100 \text{ mA}$			1.2	
Reverse voltage leakage current	I_{R1}	$V_R = 80 \text{ V}$			0.1	uA
Junction capacitance	C_j	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			2	pF
Reverse recovery time	t_{rr}	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$			3	ns

■ Marking

Marking	A
---------	---

High Speed Switching Diodes

HSC119 (KSC119)

■ Typical Characteristics

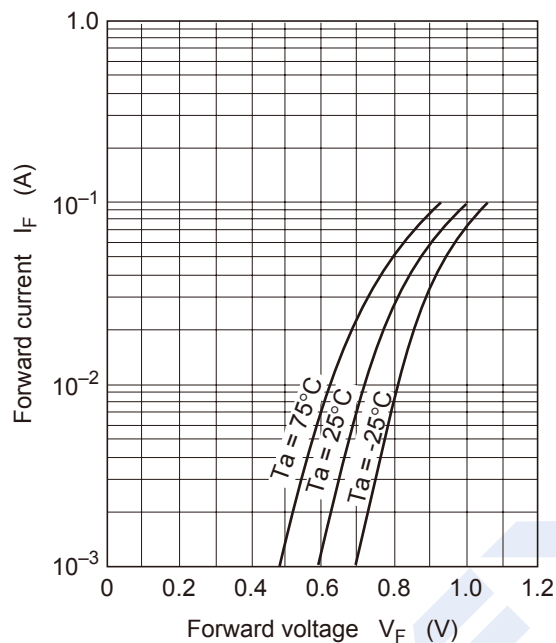


Fig.1 Forward current vs. Forward voltage

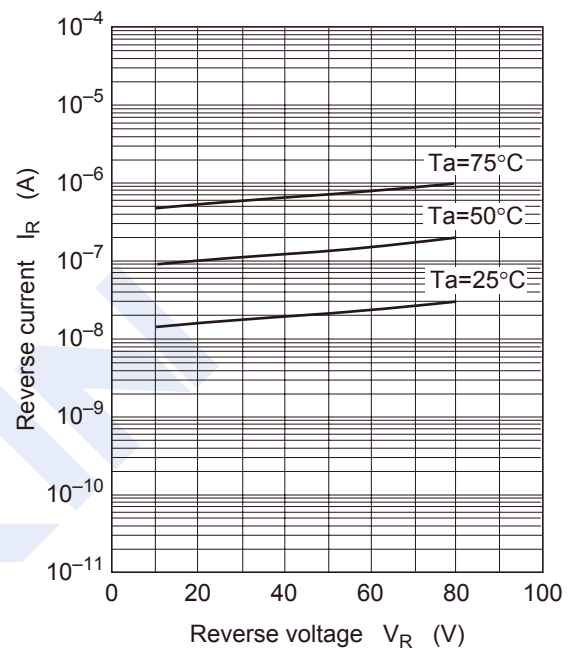


Fig.2 Reverse current vs. Reverse voltage

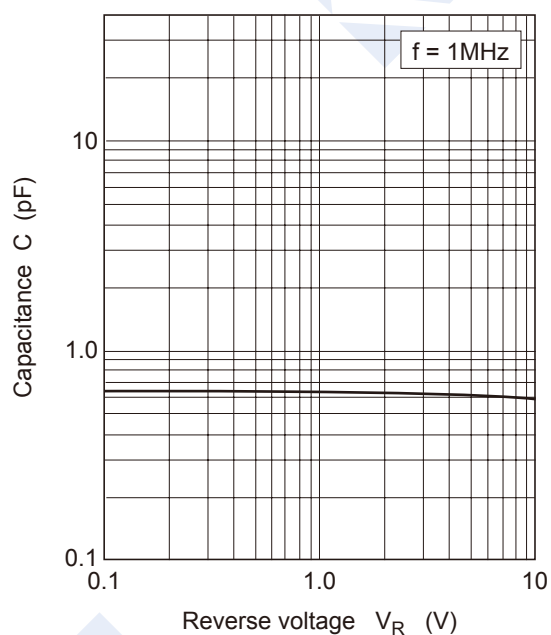


Fig.3 Capacitance vs. Reverse voltage

