
HSU119

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-444(Z)
Rev 0
March 1996

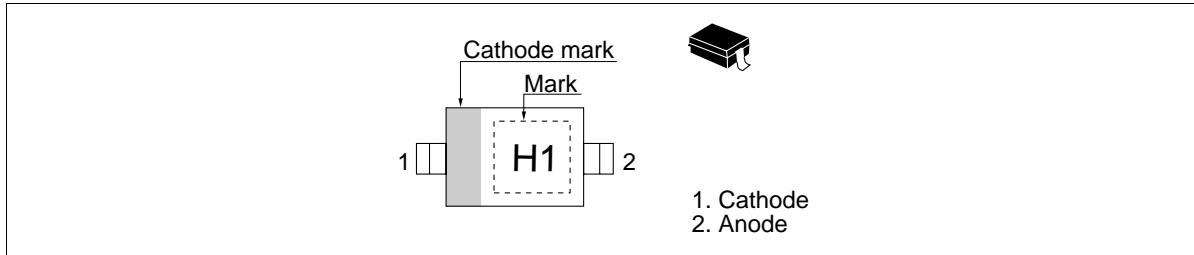
Features

- Low capacitance. ($C=2.0\text{pF}$ max)
- Short reverse recovery time. ($\text{trr}=3.0\text{ns}$ max)
- Ultra small Resin Package (URP) is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSU119	H1	URP

Outline



HSU119

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

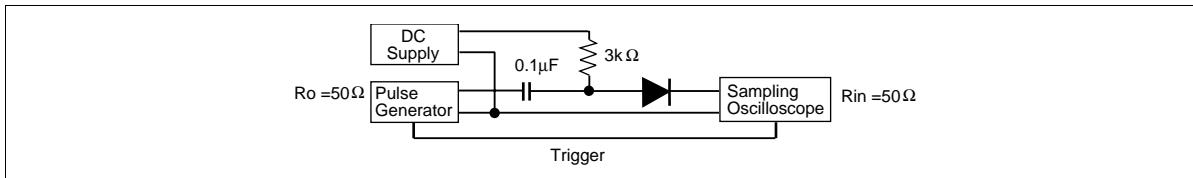
Item	Symbol	Value	Unit
Peak reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Average forward current	IO	100	mA
Peak forward current t	IFM	225	mA
Non-Repetitive peak forward surge current	IFSM*1	4	A
Junction temperature	Tj	125	$^\circ\text{C}$
Storage temperature	Tstg	-55 to +125	$^\circ\text{C}$

Note 1. Within 1E s forward surge current.

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	VF1	~	~	0.8	V	IF = 10 mA
	VF2	~	~	1.2		IF = 100 mA
Reverse current	IR	~	~	0.1	μA	VR = 80V
Capacitance	C	~	~	2.0	pF	VR = 0V, f = 1 MHz
Reverse recovery time*1	trr	~	~	3.0	ns	IF = 10 mA, VR = 6V RL=50 Ω

Notes 1. Reverse recovery time test circuit



Main Characteristic

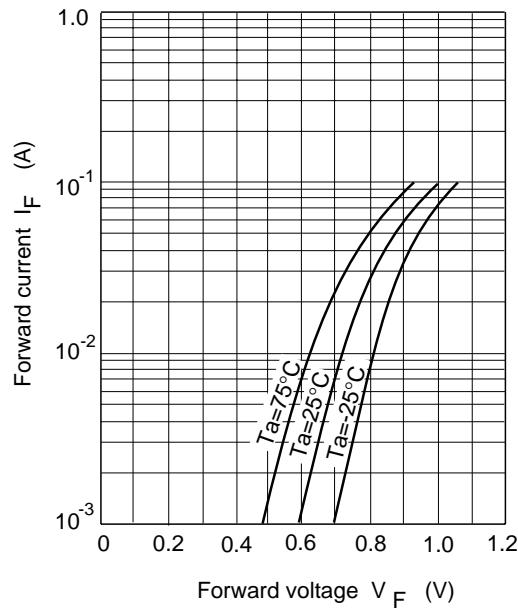


Fig.1 Forward current Vs. Forward voltage

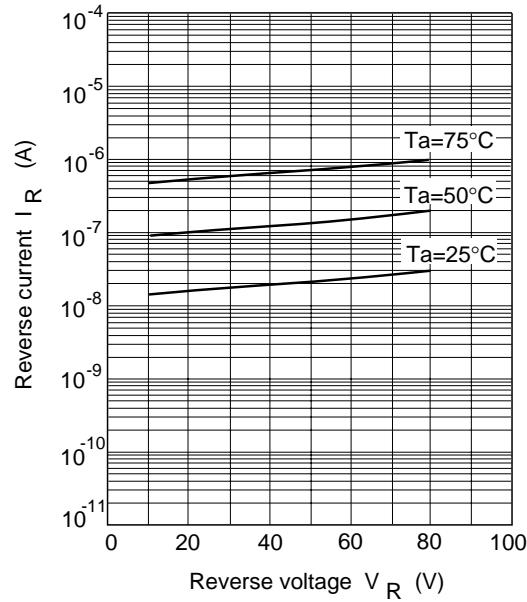


Fig.2 Reverse current Vs. Reverse voltage

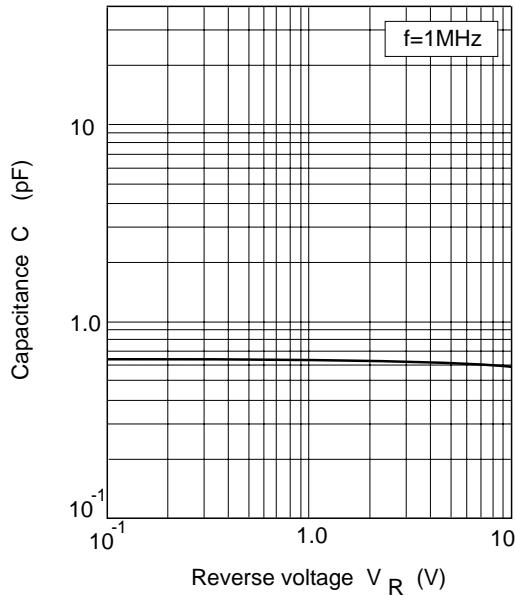


Fig.3 Capacitance Vs. Reverse voltage

HSU119

Package Dimensions

Unit : mm

