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## HSU119

Silicon Epitaxial Planar Diode for High Speed Switching

# HITACHI

ADE-208-444(Z)

Rev 0

March 1996

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### Features

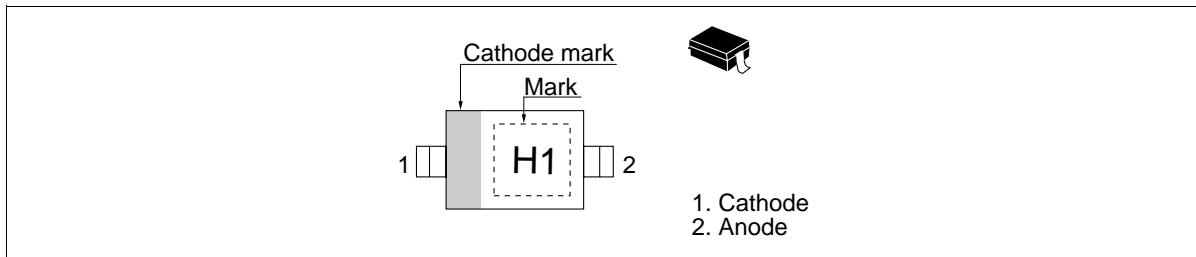
- Low capacitance. ( $C=2.0\text{pF}$  max)
- Short reverse recovery time. ( $t_{rr}=3.0\text{ns}$  max)
- Ultra small Resin Package (URP) is suitable for high density surface mounting and high speed assembly.

### Ordering Information

Type No.	Laser Mark	Package Code
HSU119	H1	URP

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### Outline



## HSU119

### Absolute Maximum Ratings (Ta = 25°C)

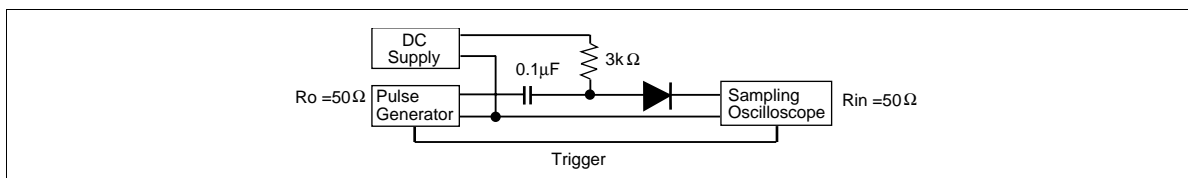
Item	Symbol	Value	Unit
Peak reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Average forward current	IO	100	mA
Peak forward current t	IFM	225	mA
Non-Repetitive peak forward surge current	IFSM*1	4	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55~+125	°C

Note 1. Within 1É s forward surge current.

### Electrical Characteristics (Ta = 25°C)

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

Notes 1. Reverse recovery time test circuit



Main Characteristic

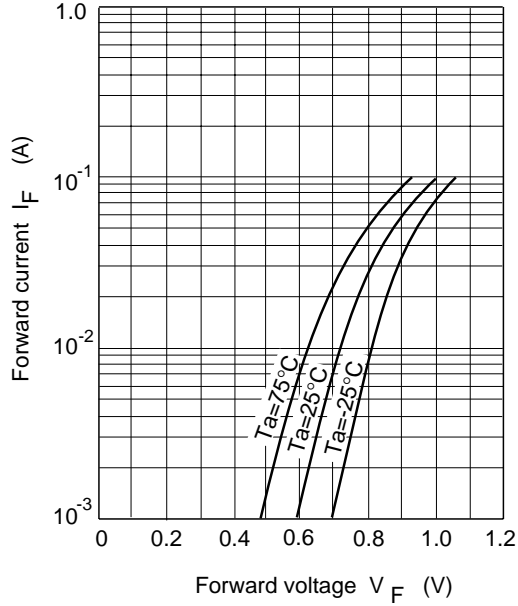


Fig.1 Forward current Vs. Forward voltage

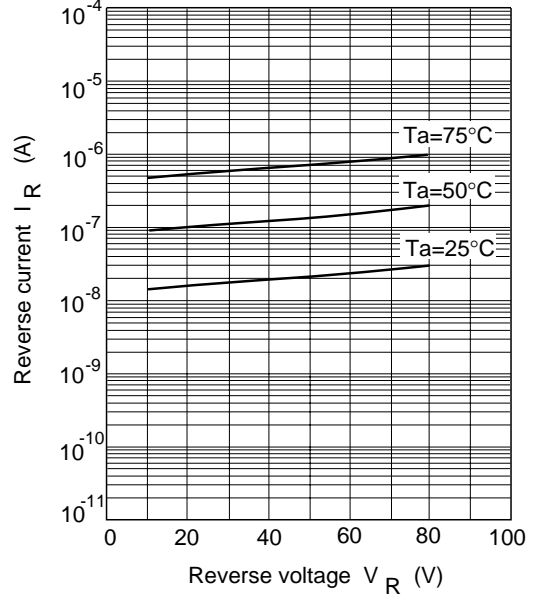


Fig.2 Reverse current Vs. Reverse voltage

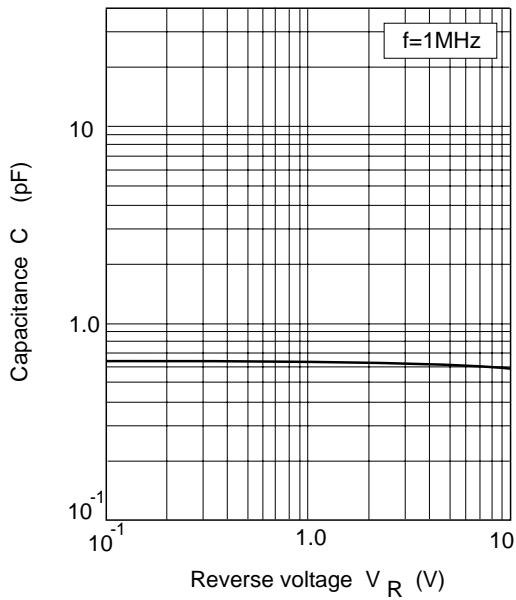


Fig.3 Capacitance Vs. Reverse voltage

## HSU119

### Package Dimensions

Unit : mm

