

HSM2694

Silicon Epitaxial Planar Diode for Tuner Band Switch

HITACHI

Preliminary
Rev. 1
Jun. 1993

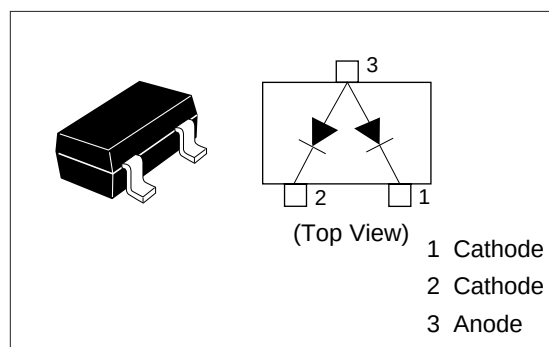
Features

- Low forward resistance. ($r_f = 0.9\Omega$ max)
- Low capacitance. ($C = 1.2\text{pF}$ max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSM2694	B 3	MPAK

Pin Arrangement



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

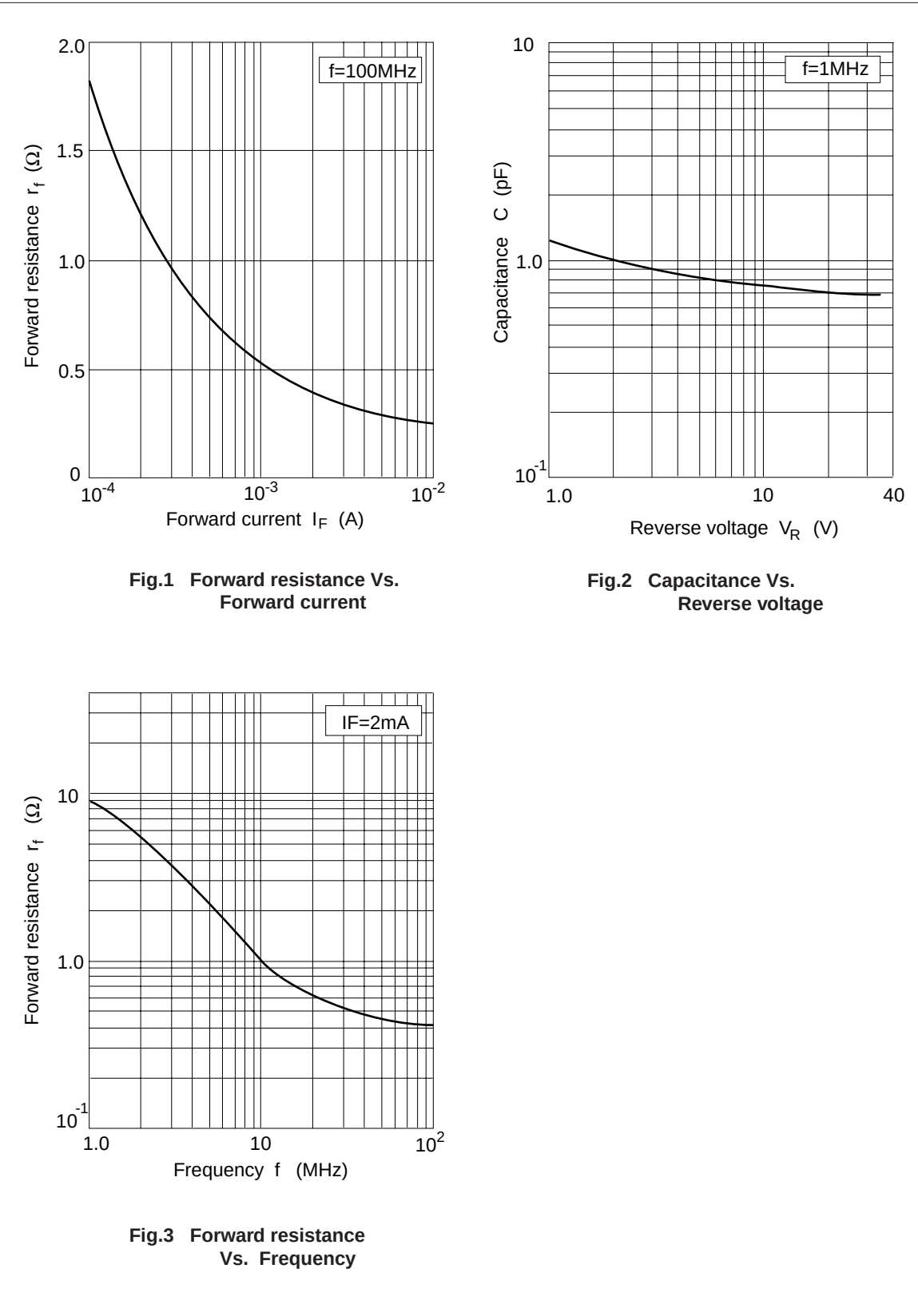
Item	Symbol	Value	Unit
Reverse voltage	V_R	35	V
Power dissipation	p_d *	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-45 to +125	$^\circ\text{C}$
Operation temperature	T_{opr}	-20 to +60	$^\circ\text{C}$

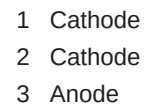
* Two device total

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	35	—	—	V	$I_R = 10\ \mu\text{A}$
Reverse current	I_R	—	—	50	nA	$V_R = 25\ \text{V}$
Forward voltage	V_F	—	—	1.0	V	$I_F = 10\ \text{mA}$
Capacitance	C	—	—	1.2	pF	$V_R = 6\ \text{V}$, $f = 1\ \text{MHz}$
Forward resistance	r_f	—	—	0.9	Ω	$I_F = 2\ \text{mA}$, $f = 100\ \text{MHz}$

* Per one device





HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011

HSU277

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

HITACHI

Rev. 5
Sep. 1995

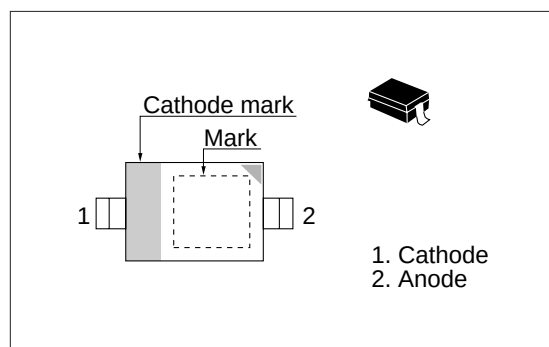
Features

- Low forward resistance. ($r_f=0.7\Omega$ max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HSU277	3	URP

Outline



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

Item	Symbol	Value	Unit
Reverse voltage	V_R	35	V
Junction temperature	T_j	125	$^\circ\text{C}$
Power dissipation	P_d	150	mW
Operation temperature	T_{opr}	-20 to + 60	$^\circ\text{C}$
Storage temperature	T_{stg}	-45 to +125	$^\circ\text{C}$

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	35	—	—	V	$I_R = 10\ \mu\text{A}$
Reverse current	I_R	—	—	50	nA	$V_R = 25\ \text{V}$
Forward voltage	V_F	—	—	1.0	V	$I_F = 10\ \text{mA}$
Capacitance	C	—	—	1.2	pF	$V_R = 6\ \text{V}$, $f = 1\ \text{MHz}$
Forward resistance	r_f	—	—	0.7	Ω	$I_F = 2\ \text{mA}$, $f = 100\ \text{MHz}$

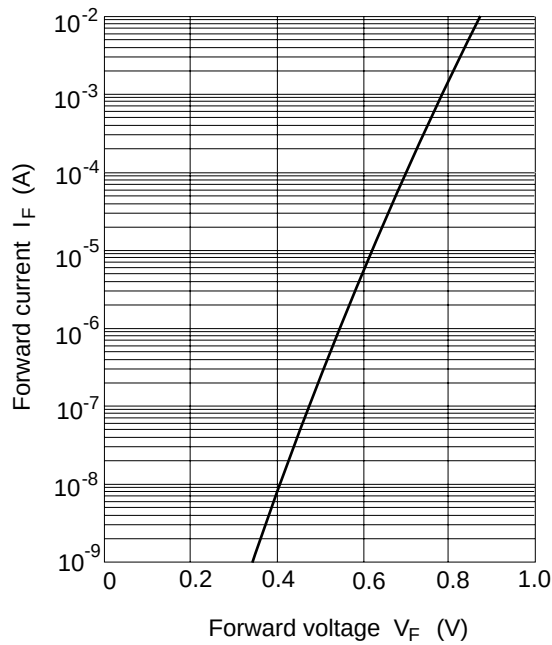


Fig.1 Forward current Vs. Forward voltage

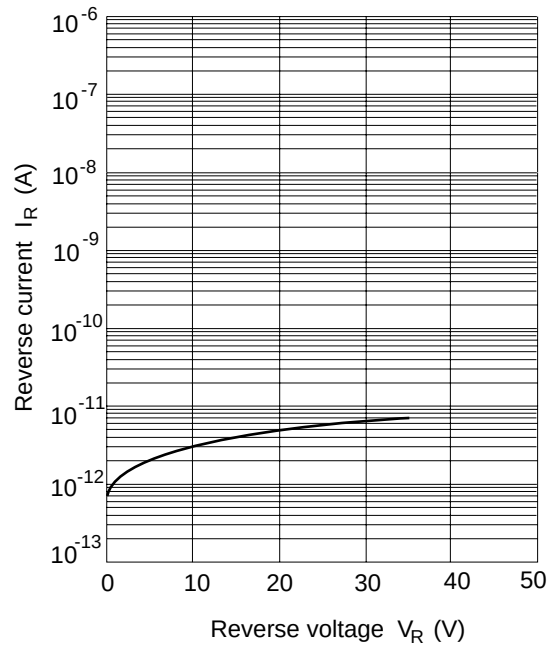


Fig.2 Reverse current Vs. Reverse voltage

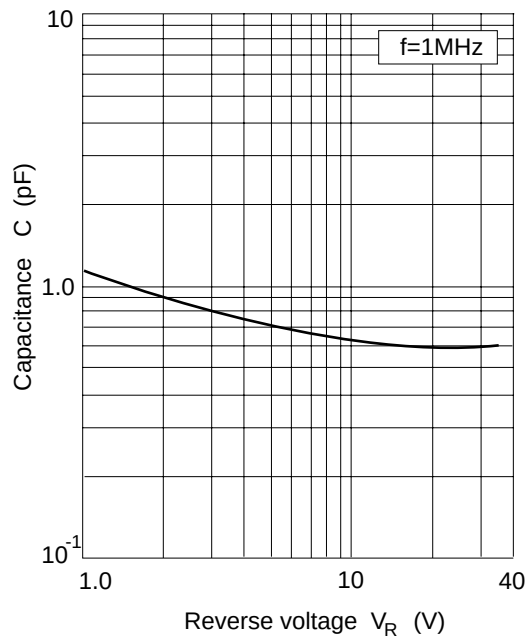


Fig.3 Capacitance Vs. Reverse voltage

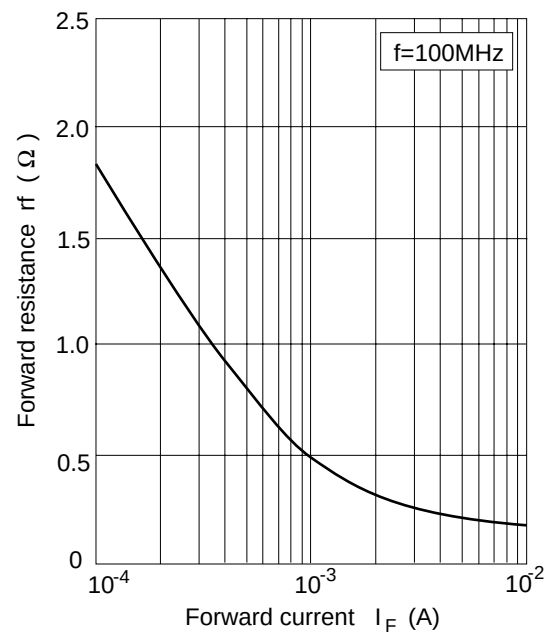
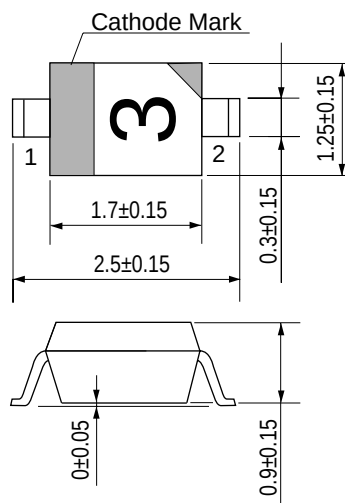


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	URP
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.004