

HVL147M

Silicon Epitaxial Trench Pin Diode for Antenna Switching

REJ03G0394-0300 Rev.3.00 Jan 20, 2006

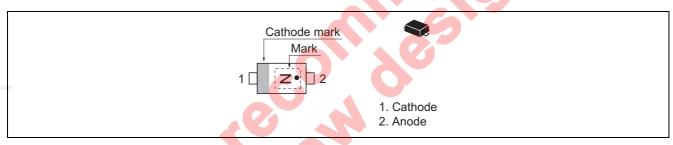
Features

- Adopting the trench structure improves low capacitance. (C = 0.31 pF max)
- Low forward resistance. (rf = $1.5 \Omega \text{ max}$)
- Low operation current.
- Thin Extremely small Flat Lead Package (TEFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HVL147M	N	TEFP	PUSF0002ZA-A

Pin Arrangement



Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit
Reverse voltage	V _R	30	V
Forward current	I _F	100	mA
Power dissipation	Pd	100	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Electrical Characteristics

 $(Ta = 25^{\circ}C)$

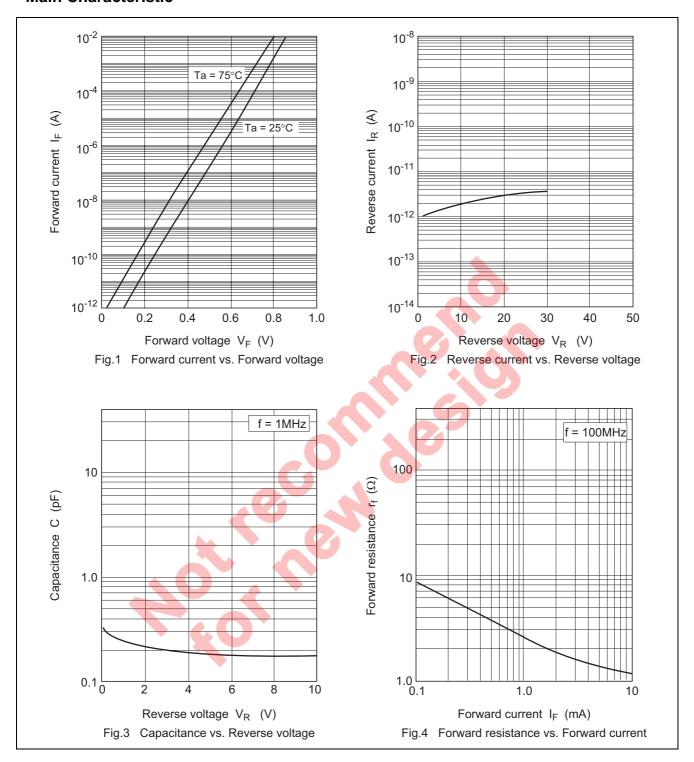
Item	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse current	I _R	_	_	100	nA	V _R = 30 V
Forward voltage	V _F	_	_	1.00	V	$I_F = 10 \text{ mA}$
Capacitance	С	_	_	0.31	pF	$V_R = 1 V, f = 1 MHz$
Forward resistance	r _f	_	2.5	_	Ω	I _F = 2 mA, f = 100 MHz
		_	_	1.5		I _F = 10 mA, f = 100 MHz
ESD-Capability *1	_	100	_	_	V	$C = 200 \text{ pF}, R = 0 \Omega$, Both forward and
						reverse direction 1 pulse.

Notes: 1. Failure criterion; $I_R > 100 \text{ nA}$ at $V_R = 30 \text{ V}$

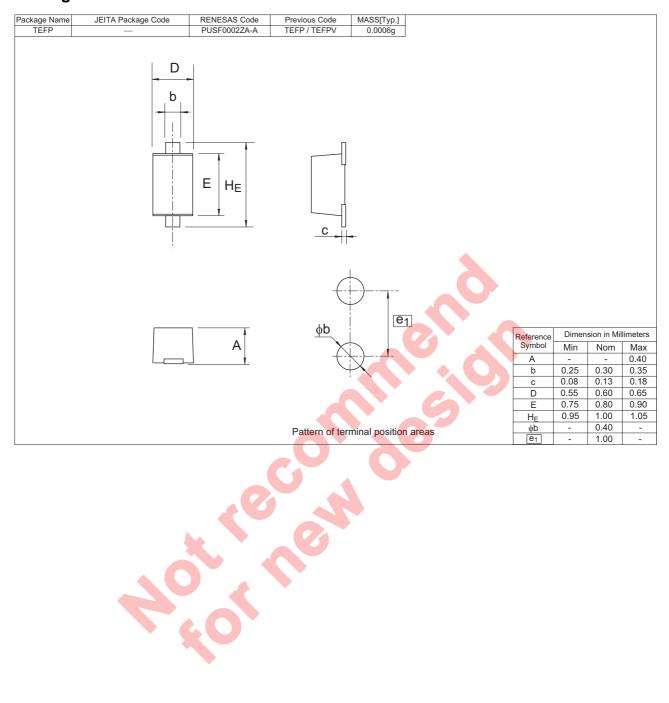
2. For TEFP package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

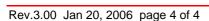


Main Characteristic



Package Dimensions





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