Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

HITACHI

ADE-208-056E (Z)

Rev. 5 Jun. 1993

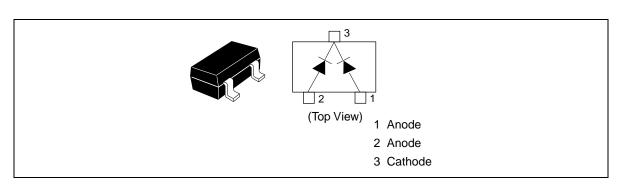
Features

- Low forward resistance. $(r_f = 5.5\Omega max)$
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVM187WK	H1	MPAK

Pin Arrangement





Absolute Maximum Ratings

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

Item	Symbol	Value	Unit
Reverse voltage	V_R	60	V
Forward current	I _F	50	mA
Power dissipation	Pd*	100	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note: Per one device

Electrical Characteristics

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

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	$V_{\scriptscriptstyle F}$	_	_	1.0	V	$I_F = 10 \text{mA}$
Reverse current	I _R	_	_	100	nA	V _R = 60V
Capacitance	С	_	_	2.4	pF	$V_R = 0V, f = 1MHz$
Forward resistance	r _f	3.5	_	5.5	Ω	I _F = 10mA, f = 100MHz
ESD-Capability	_	200	_	_	V	*C = 200pF, Both forward and reverse direction 1 pulse.

Note: Failure criterion; $I_R \ge 100$ nA at $V_R = 60$ V

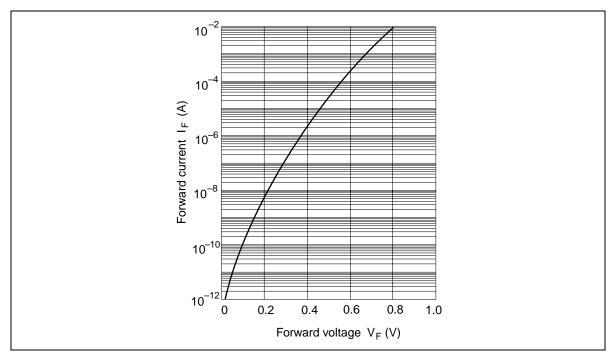


Fig.1 Forward current Vs. Forward voltage

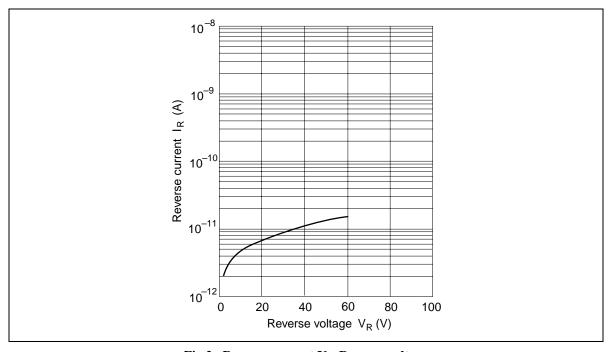


Fig.2 Reverse current Vs. Reverse voltage

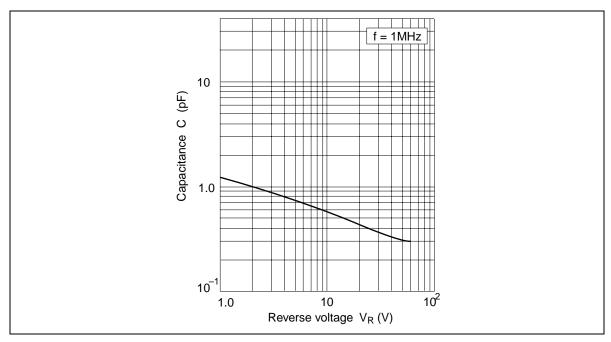


Fig.3 Capacitance Vs. Reverse voltage

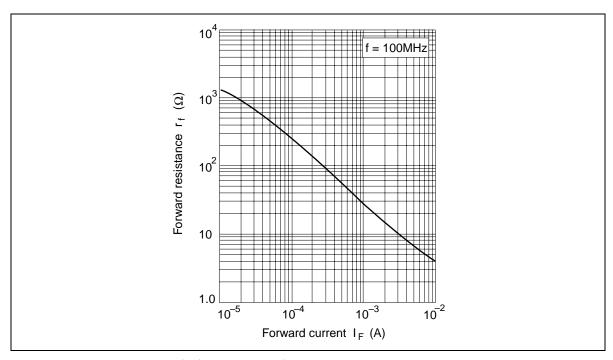
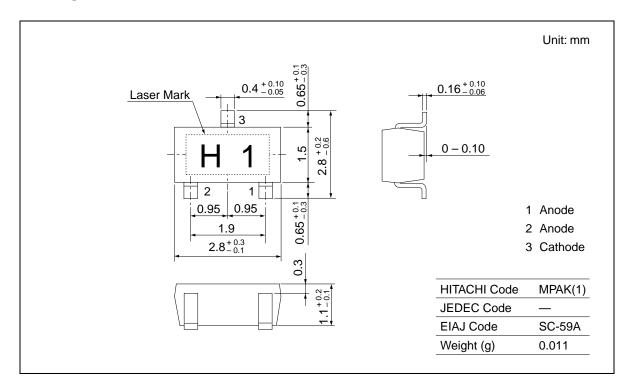


Fig.4 Forward resistance Vs. Forward current

Package Dimensions



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