HSM83

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

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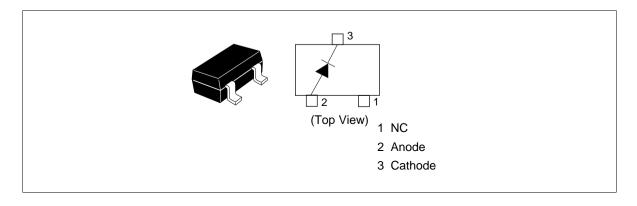
Features

- High reverse voltage. $(V_R = 250V)$
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSM83	F7	MPAK

Outline





HSM83

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

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	300	V
Reverse voltage	V_R	250	V
Peak forward current	I _{FM}	300	mA
Non-Repetitive peak forward surge current	I _{FSM} ^{*1}	2	A
Average rectified current	Io	100	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−55 to +125	°C

Note: 1. Value at duration of 10msec.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V_{F}	_	_	1.2	V	I _F = 100 mA
Reverse current	I _{R1}	_	_	0.2	μΑ	V _R = 250V
	I _{R2}	_	_	100		V _R = 300V
Capacitance	С	_	1.5	3.0	pF	V _R = 0V, f = 1 MHz
Reverse recovery time	t _{rr}		_	100	ns	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3\text{mA}, R_L = 100\Omega$

Main Characteristic

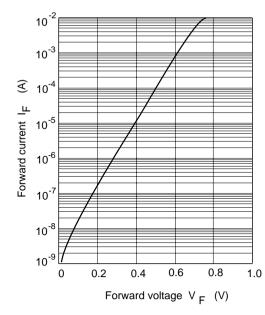


Fig.1 Forward current Vs. Forward voltage

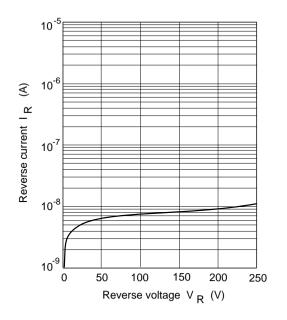


Fig.2 Reverse current Vs. Reverse voltage

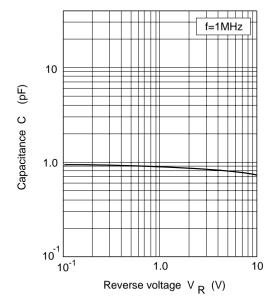
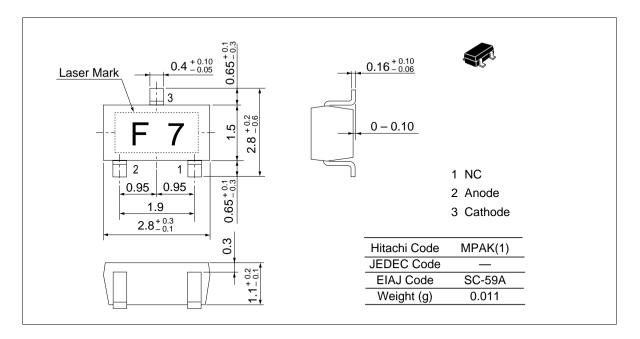


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions

Unit: mm



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