



Silicon Epitaxial Planar Switching Diode

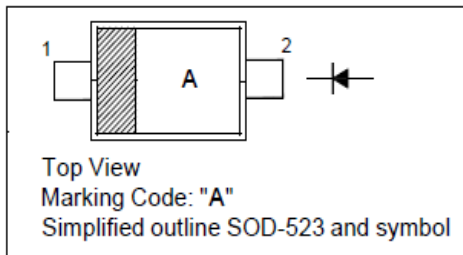
Reverse Voltage - 75 Volts
Forward Current - 125 Milliampere

FEATURES

- Fast Switching Speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance

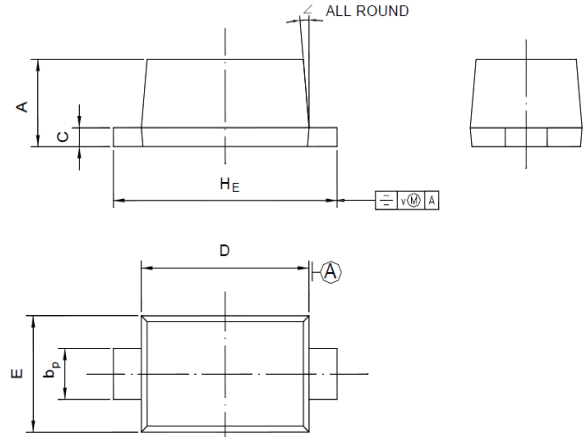
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Note: Products with logo or are made by HY Electronic (Cayman) Limited.

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Dimensions in inches and (millimeters)

Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	125	mA
Forward Continuous Current	I _{FM}	250	mA
Non-repetitive Peak Forward Surge Current @1.0us	I _{FSM}	2	A
@100ms		1	
Thermal Resistance Junction to Ambient Air	R _{θJA}	833	°C/W
Power Dissipation	P _D	150	mW
Operating Temperature Range	T _J	-65 to + 150	°C
Storage Temperature Range	T _{STG}	-65 to + 150	°C

Characteristics at Ta= 25°C

Parameter	Symbol	Test Conditions	Min	Max	Unit
Peak Reverse Current	I _R	V _R =75V	---	1	uA
		V _R =20V	---	25	nA
		V _R =75V, T _J =150°C	---	50	uA
		V _R =25V, T _J =150°C	---	30	uA
Forward Voltage	V _F	I _F =1mA	---	0.715	V
		I _F =10mA	---	0.855	V
		I _F =50mA	---	1	V
		I _F =150mA	---	1.25	V
Total Capacitance	C _T	V _R =0V, f=1.0MHz	---	2	pF
Reverse Recovery Time	T _{rr}	I _{rr} =0.1*I _R , I _F =I _R =10mA, R _L =100Ω	---	4	ns

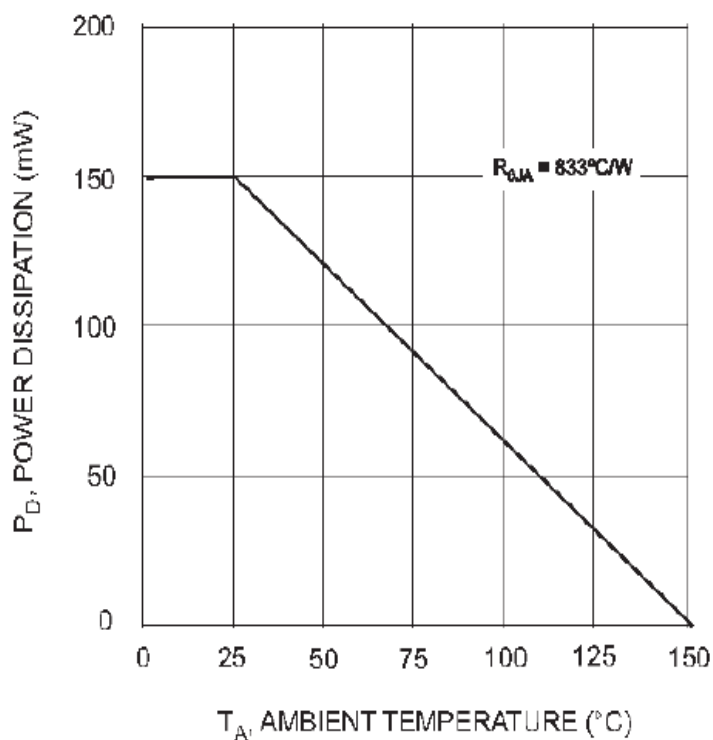


Fig. 1 Derating Curve

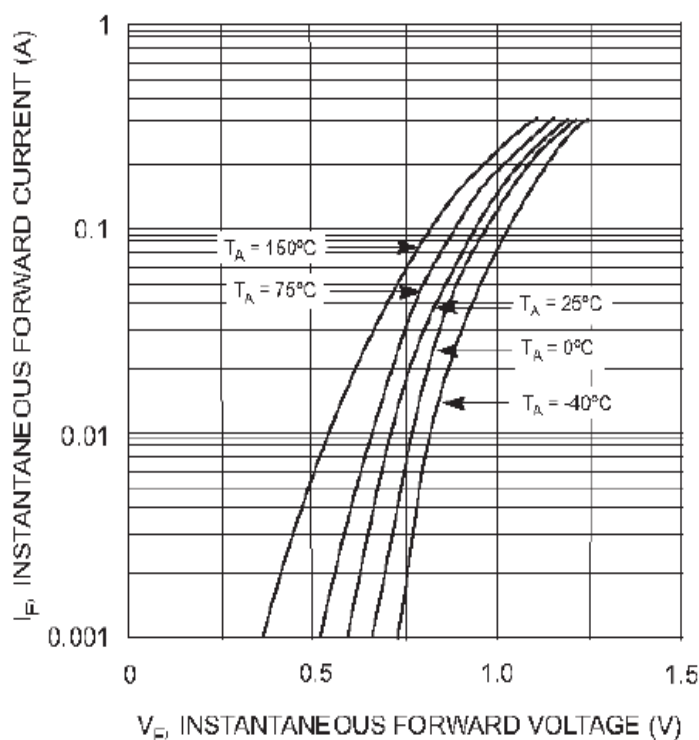


Fig. 2 Forward Characteristics

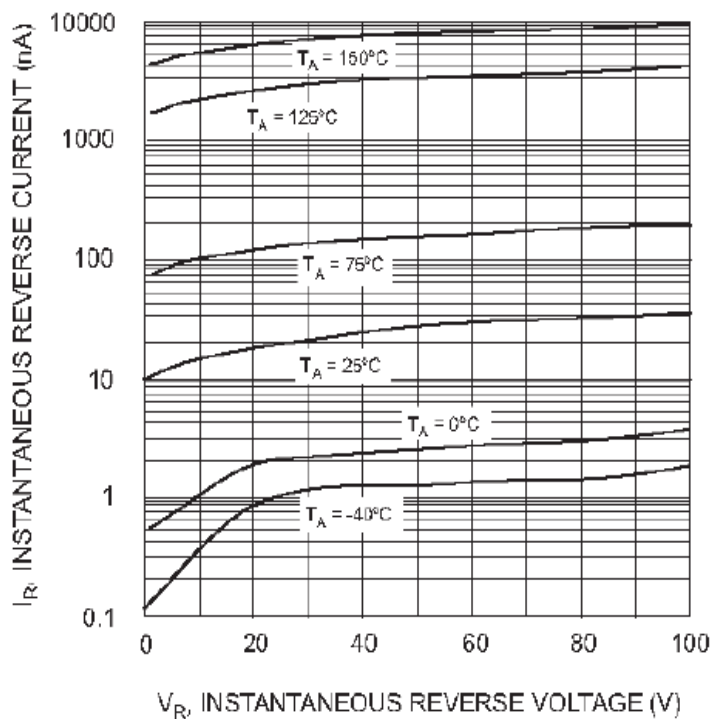


Fig. 3 Typical Reverse Characteristics

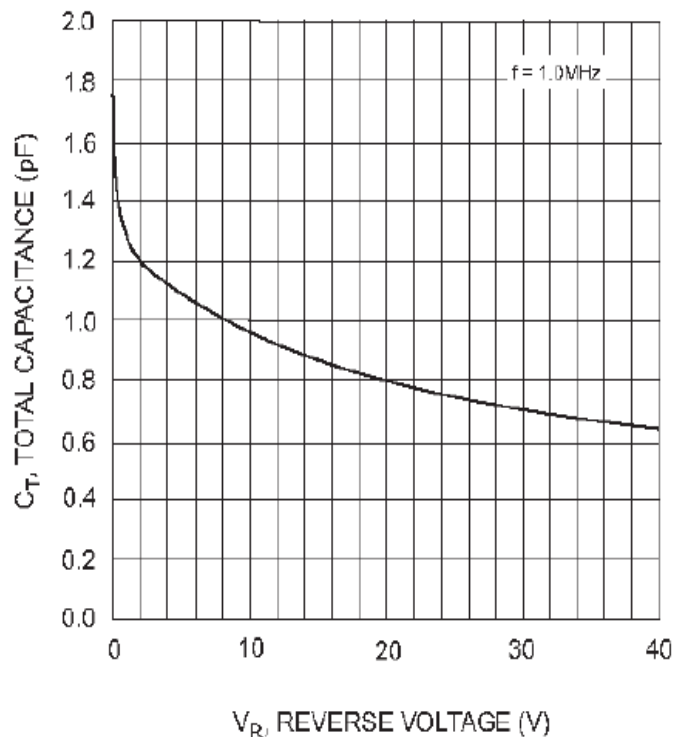


Fig. 4 Typical Capacitance vs. Reverse Voltage



Disclaimer

ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

HY makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, HY disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on HY's knowledge of typical requirements that are often placed on HY products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify HY's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, HY products are not designed for use in medical, life-saving, or life-sustaining applications or for any other applications in which the failure of the HY product could result in personal injury or death. Customers using or selling HY products not expressly indicated for use in such applications do so at their own risk. Please contact authorized HY personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of HY. Product names and markings noted herein may be trademarks of their respective owners.