

200mW SOD-523 SURFACE MOUNT Very Small Outline Flat Lead Plastic Package General Purpose Application High Speed Switching Diode

Absolute Maximum Ratings $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Value	Units	
P _D	Power Dissipation	200	mW	
T _{STG}	Storage Temperature Range	-55 to +150	°C	
TJ	Operating Junction Temperature	+150	°C	
V _R	Reverse Voltage	75	V	
I _{FSM}	Peak Forward Current (Pulse Width=1s)	500	mA	
I _{FM}	Forward Current	200	mA	

These ratings are limiting values above which the serviceability of the diode may be impaired.

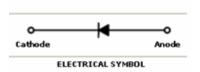
Specification Features:

- Fast Switching Device (T_{RR} <4.0 nS)
- High Speed Switching Diodes
- Extremely Small SOD-523 Package
- Flat Lead SOD-523 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

Green Product



SOD-523 Flat Lead



DEVICE MARKING CODE:

Device Type	Device Marking		
TCBAS16	E6		

Electrical Characteristics $T_A = 25^{\circ}\text{C}$ unless otherwise noted

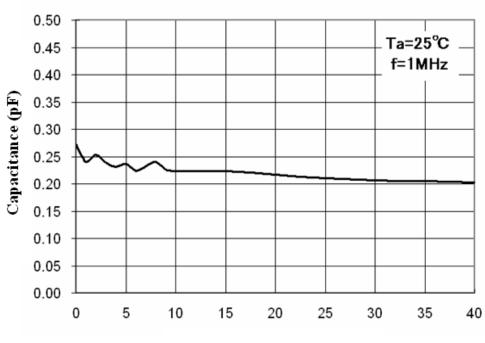
Symbol	Parameter	Test Condition	Limits		Unit
Symbol	Faiannetei	rest Condition	Min	Max	Unit
Ву	Breakdown Voltage	I _R =100μA	75		Volts
I _R	Reverse Leakage Current	V _R =75V		1	μA
V _F	Forward Voltage	I _F =1mA		0.715	
		I _F =10mA		0.855	Volts
		I _F =50mA		1.1	VOIIS
		I _F =100mA		1.3	
T_{RR}	Reverse Recovery Time	I _F =10mA			
		V _R =6V		4	nS
		R _L =100Ω			
С	Capacitance	V _R =0V, f=1M _{HZ}		4	pF

Number: DB-008 July 2011, Revision F



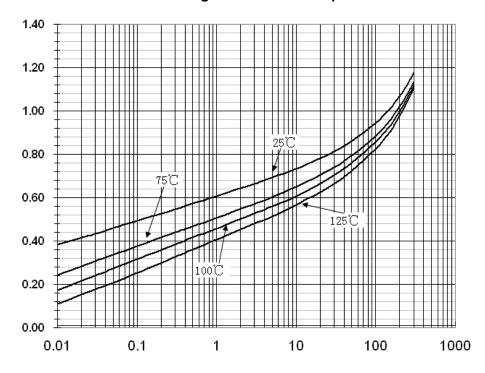
Typical Performance Characteristics

Total Capacitance



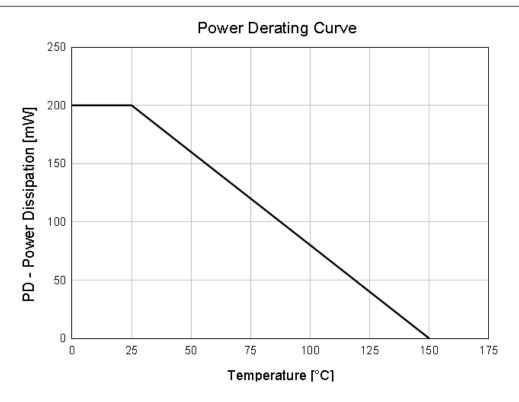
Reverse Voltage (V)

Forward Voltage vs Ambient Temperature

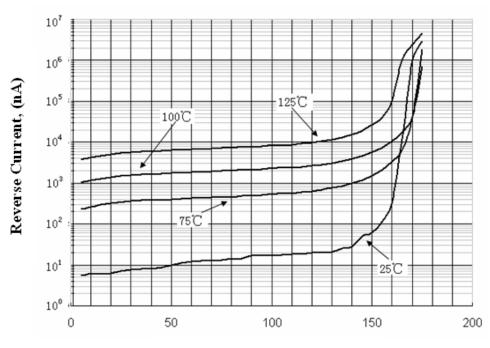


Number: DB-008 July 2011, Revision F





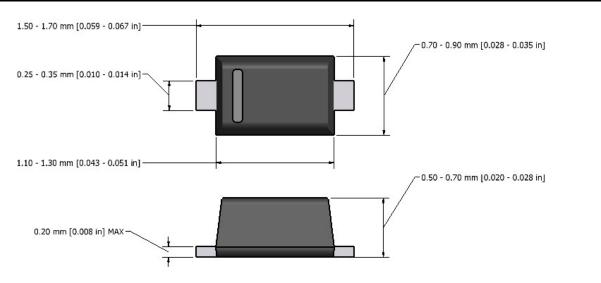
Reverse Current vs Reverse VoltageReverse



Reverse Voltage, VR (V)



Flat Lead SOD-523 Package Outline



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.





NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

This publication supersedes & replaces all information reviously supplied. For additional information, please visit our website http://www.takcheong.com, or consult your nearest Tak Cheong's sales office for further assistance.

Number: DB-100 April 14, 2008 / A