

DB0520W-DB0540W

Schottky Barrier Diode

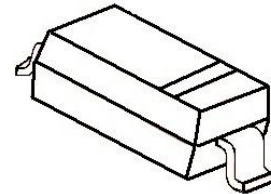
General description

Flat Lead Plastic Package Schottky Barrier Diode

FEATURES

- For use in low voltage, high frequency inverters
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Epoxy UL : 94V-0
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

SOD-123



DEVICE MARKING CODE:

Device Type	Device Marking
DB0520W	SD
DB0530W	SE
DB0540W	SF

Absolute Maximum Ratings TA = 25°C unless otherwise noted

Parameters	Symbol	DB0520W	DB0530W	DB0540W	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	I_{FM}	0.5			A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	5.5			A
Typical thermal resistance	$R_{\theta JA}$	200			°C/W
Power Dissipation	PD	500			mW
Storage temperature range	T_{STG}	-50-+150			°C
Voltage rate of change	Dv/dt	1000			V/uS

Electrical Characteristics TA = 25°C unless otherwise noted

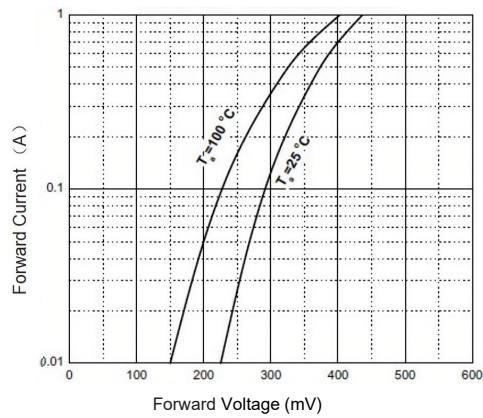
Parameters	Symbol	Test conditions	DB0520W	DB0530W	DB0540W	Unit
Maximum forward voltage	V_F	$I_F = 0.1A$	0.330	0.375		V
		$I_F = 0.5A$	0.385	0.430	0.510	
		$I_F = 1.0A$			0.620	
Maximum reverse breakdown voltage	V_R	$I_R=250\mu A$	20			V
		$I_R=200\mu A$		30		
		$I_R=20.0\mu A$			40	
Maximum reverse current	I_R	$V_R=10V$	75			uA
		$V_R=15V$		20		
		$V_R=20V$	250			
		$V_R=30V$		130		
		$V_R=40V$			20	
Capacitance between teminals	CT	$V_R = 0V, f = 1MHz$	170			pF



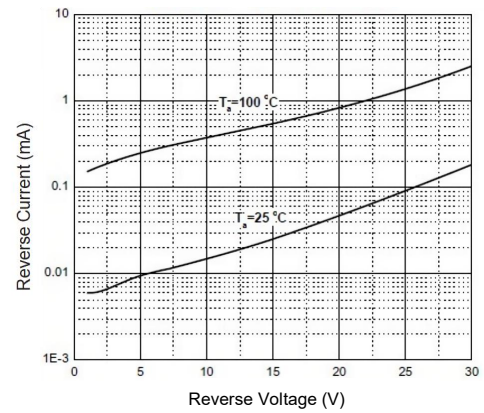
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Typical Characteristics

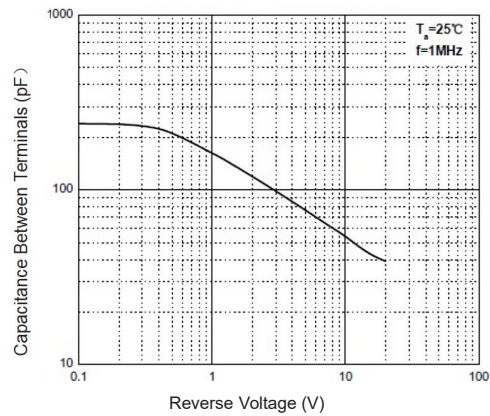
Forward Characteristics



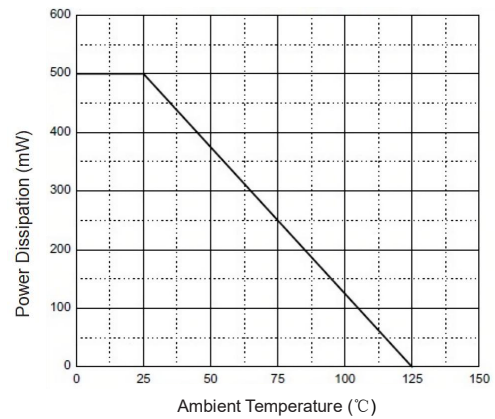
Reverse Characteristics



Capacitance Characteristics

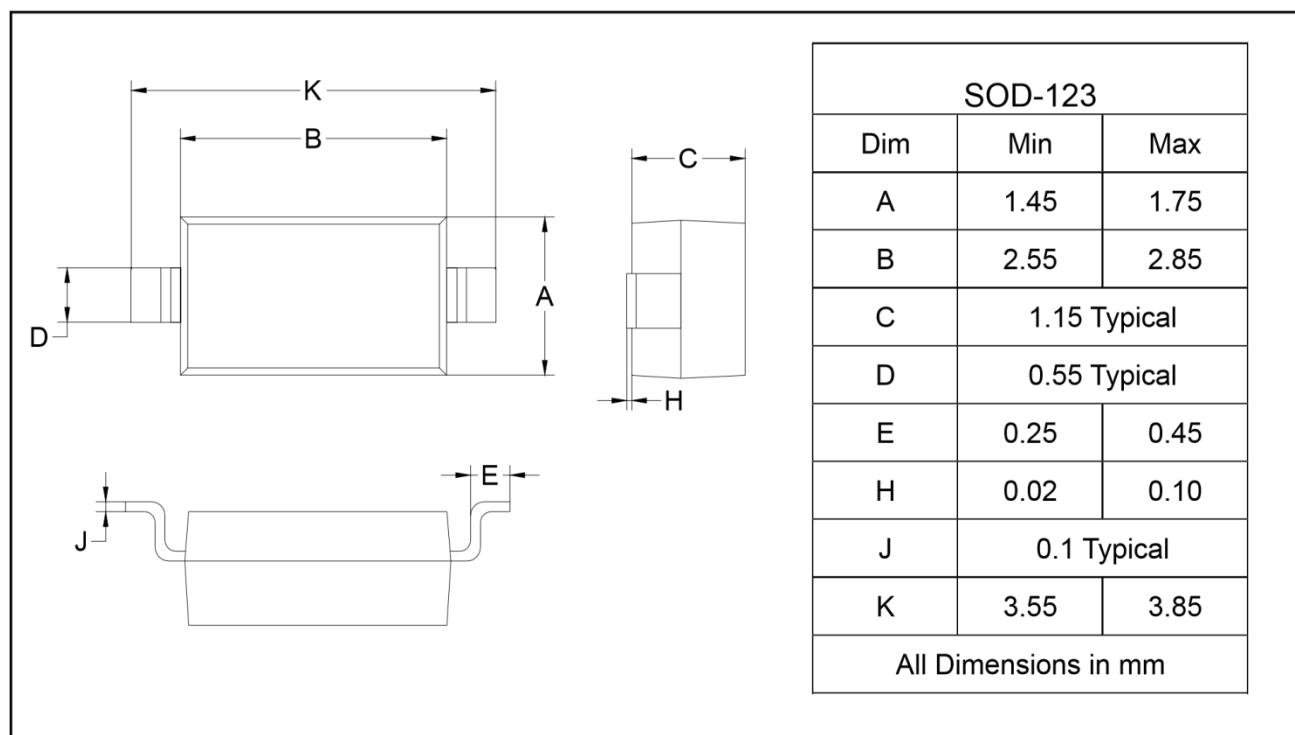


Power Derating Curve

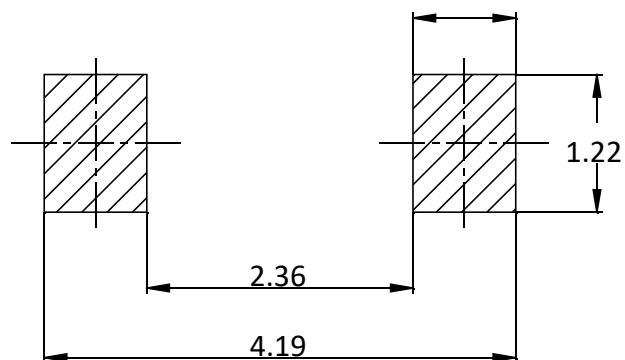


DB0520W-DB0540W

SOD-123 Package Outline



SOLDERING FOOTPRINT



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