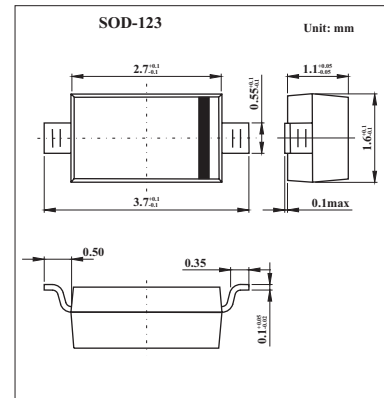


Schottky Rectifier Diodes

KBR0520LW/0530W/0540W (MBR0520LW/0530W/0540W)



■ Features

- Low forward voltage drop
- Guard ring construction for Transient protection.
- High conductance.
- Also available in lead free version.

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	KBR0520LW	KBR0530W	KBR0540W	Unit
Peak repetitive peak reverse voltage	V _{RRM}				
Working peak	V _{RWM}	20	30	40	V
DC blocking voltage	V _R				
RMS reverse voltage	V _{R(RMS)}	14	21	28	V
Average rectified output current	I _O	500			mA
Peak forward surge current	I _{FSM}	5.5			A
Power dissipation	P _d	410			mW
Voltage rate of change	dv/dt	1000			V/μs
Thermal resistance junction to ambient	R _{θJA}	304			°C/W
Storage temperature	T _{stg}	-65 to +125			°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit		
Minimum Reverse Breakdown Voltage	KBR0520LW	V _{(BR)R}	I _R =250 μA			V		
	KBR0530W						I _R =200 μA	30
	KBR0540W						I _R =20 μA	40
Forward voltage	KBR0520LW	V _{F1}	I _F =0.1A			V		
	KBR0530W						0.3	
Forward voltage	KBR0520LW	V _{F2}	I _F =0.5A			V		
	KBR0530W						0.375	
	KBR0540W						0.430	
Forward voltage	KBR0540W	V _{F3}	I _F =1A			V		
Reverse current	KBR0520LW	I _{R1}	V _R =10V	75		μA		
	KBR0530W	I _{R2}	V _R =15V	20		μA		
Reverse current	KBR0520LW	I _{R3}	V _R =20V	250		μA		
	KBR0540W			10		μA		
Reverse current	KBR0530W	I _{R4}	V _R =30V	130		μA		
	KBR0540W	I _{R5}	V _R =40V	20		μA		
Capacitance between terminals	C _T	V _R =0V, f=1MHz	170			pF		

■ Marking

NO.	KBR0520LW	KBR0530W	KBR0540W
Marking	SD	SE	SF

KBR0520LW/0530W/0540W
(MBR0520LW/0530W/0540W)

■ Typical Characteristics

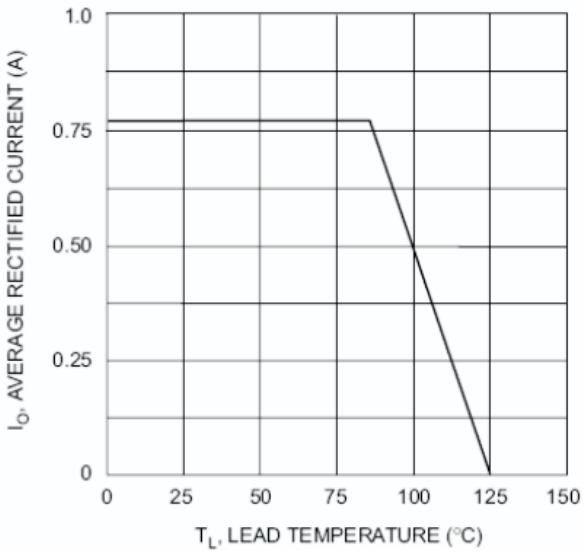


Fig.1 Forward Current Derating Curve

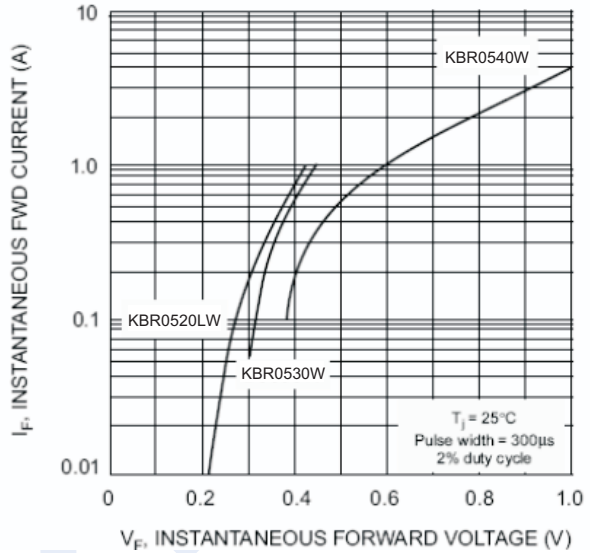


Fig.2 Typical Forward Characteristics

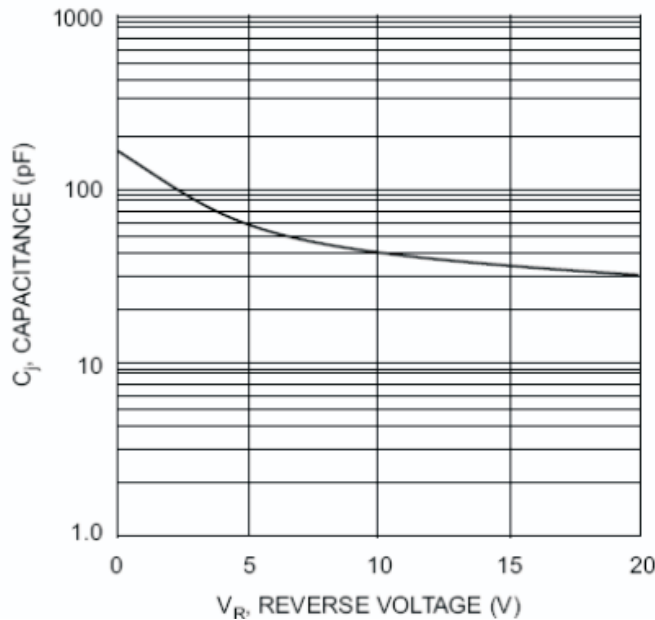


Fig.3 Typ. Junction Capacitance vs Reverse Voltage