

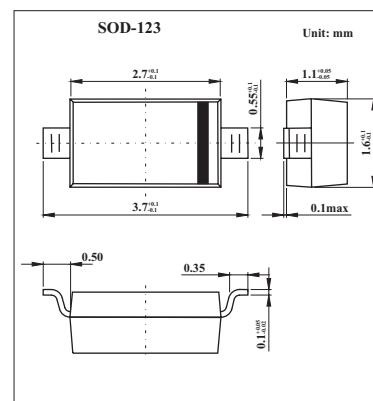
Schottky Rectifier Diodes

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}	20	30	40	V
Working peak DC blocking voltage	V _{RWM}				
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	Test conditions	Min	Typ	Max	Unit
Minimum Reverse Breakdown Voltage	V _{(BR)R}	KBR0520LW I _R =250 μA	20			V
		KBR0530W I _R =200 μA	30			
		KBR0540W I _R =20 μA	40			
Forward voltage	V _{F1}	KBR0520LW KBR0530W I _F =0.1A	0.3			V
			0.375			
Forward voltage	V _{F2}	KBR0520LW KBR0530W KBR0540W I _F =0.5A	0.375			V
			0.430			
			0.510			
Forward voltage	V _{F3}	KBR0540W I _F =1A	0.62			V
Reverse current	I _{R1}	KBR0520LW V _R =10V	75			μA
	I _{R2}	KBR0530W V _R =15V	20			μA
Reverse current	I _{R3}	KBR0520LW KBR0540W V _R =20V	250			μA
			10			μA
Reverse current	I _{R4}	KBR0530W V _R =30V	130			μA
	I _{R5}	KBR0540W 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

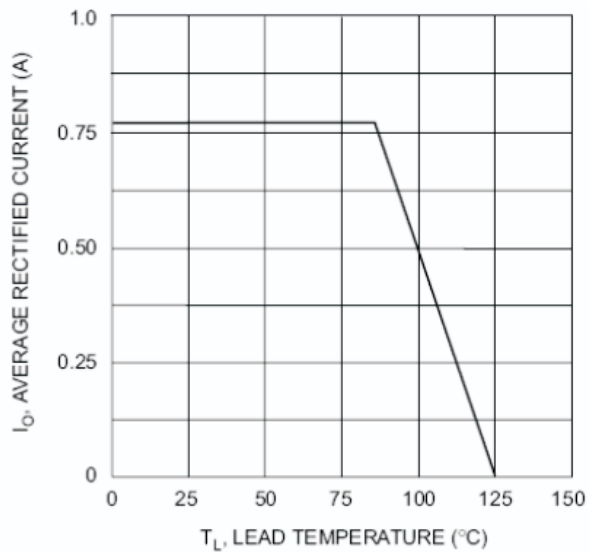


Fig.1 Forward Current Derating Curve

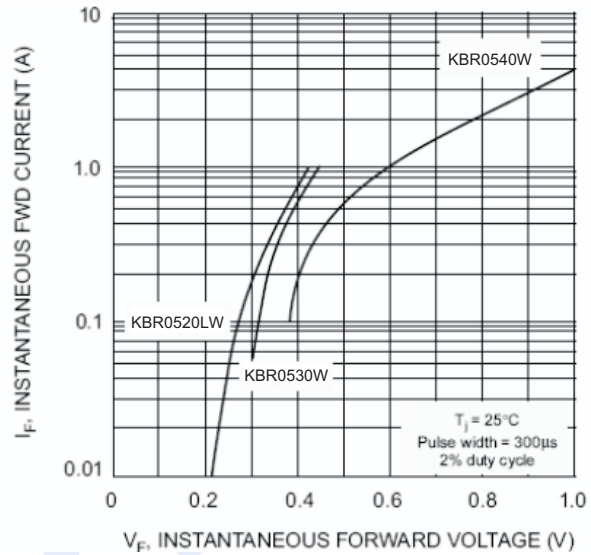


Fig.2 Typical Forward Characteristics

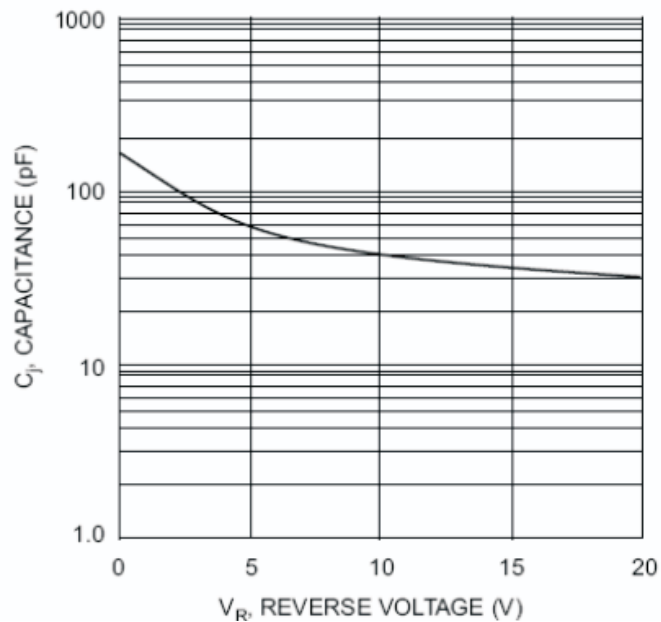


Fig.3 Typ. Junction Capacitance vs Reverse Voltage