

SMD Type

Diodes

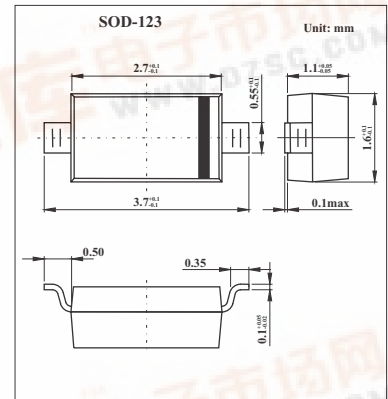
Schottky Rectifier Diodes

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	VRRM				
Working peak	VRWM	20	30	40	V
DC blocking voltage	VR				
RMS reverse voltage	VR(RMS)	14	21	28	V
Average rectified output current	IO	500			mA
Peak forward surge current	IFSM	5.5			A
Power dissipation	Pd	410			mW
Voltage rate of change	dv/dt	1000			V/μs
Thermal resistance junction to ambient	RθJA	304			°C/W
Storage temperature	Tstg	-65 to +125			°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Minimum Reverse Breakdown Voltage	V(BR)R	KBR0520LW IR=250 μA	20			V
		KBR0530W IR=200 μA	30			
		KBR0540W IR=20 μA	40			
Forward voltage	VF1	KBR0520LW KBR0530W IF=0.1A	0.3			V
			0.375			
Forward voltage	VF2	KBR0520LW KBR0530W KBR0540W IF=0.5A	0.375			V
			0.430			
			0.510			
Forward voltage	VF3	KBR0540W IF=1A	0.62			V
Reverse current	IR1	KBR0520LW VR=10V	75			μA
	IR2	KBR0530W VR=15V	20			
Reverse current	IR3	KBR0520LW KBR0540W VR=20V	250			μA
			10			
Reverse current	IR4	KBR0530W VR=30V	130			μA
	IR5	KBR0540W VR=40V	20			
Capacitance between terminals	CT	VR=0V, f=1MHz	170			pF

■ Marking

NO.	KBR0520LW	KBR0530W	KBR0540W
Marking	SD	SE	SF

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

■ Typical Characteristics

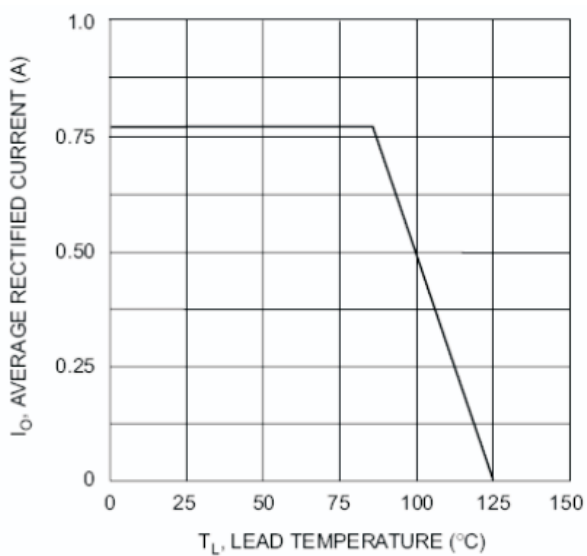


Fig.1 Forward Current Derating Curve

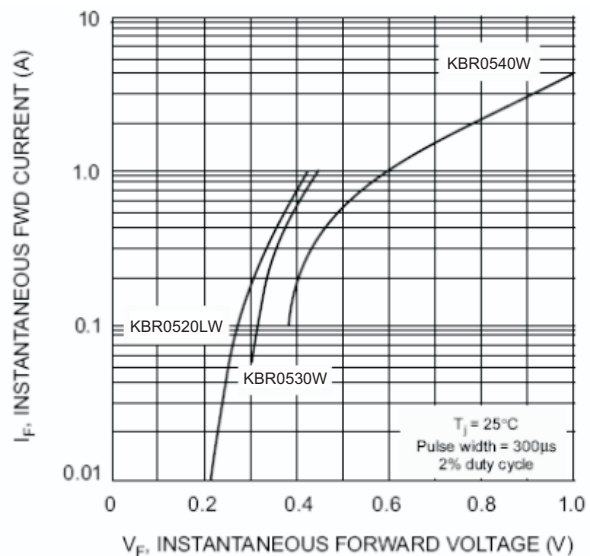


Fig.2 Typical Forward Characteristics

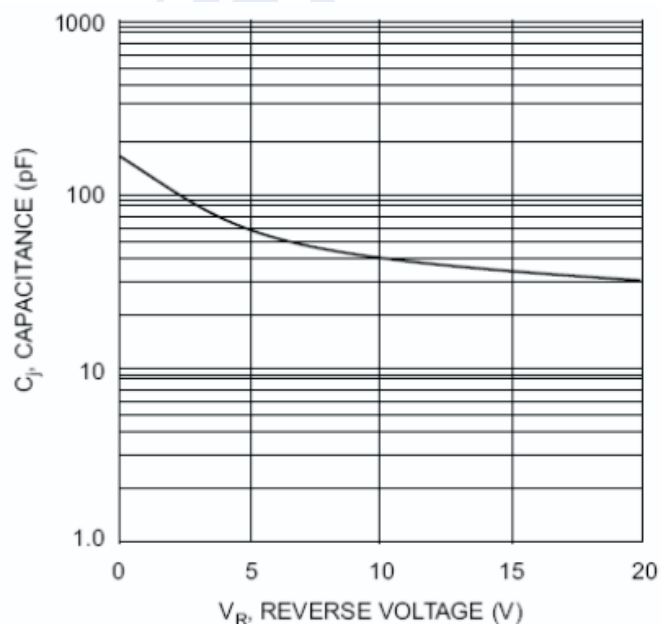


Fig.3 Typ. Junction Capacitance vs Reverse Voltage