

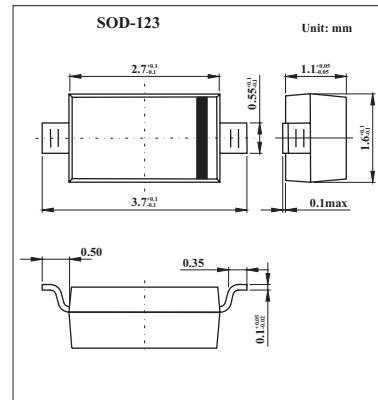
## Schottky Rectifier Diodes

### 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 <sub>RMM</sub>				V
Working peak DC blocking voltage	V <sub>RWM</sub>	20	30	40	V
RMS reverse voltage	V <sub>R</sub> (RMS)	14	21	28	V
Average rectified output current	I <sub>O</sub>		500		mA
Peak forward surge current	I <sub>FSM</sub>		5.5		A
Power dissipation	P <sub>d</sub>		410		mW
Voltage rate of change	dV/dt		1000		V/μs
Thermal resistance junction to ambient	R <sub>θJA</sub>		304		°C/W
Storage temperature	T <sub>stg</sub>		-65 to +125		°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Minimum Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =250 μA	20			V
		I <sub>R</sub> =200 μA	30			
		I <sub>R</sub> =20 μA	40			
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> =0.1A	0.3			V
			0.375			
Forward voltage	V <sub>F2</sub>	I <sub>F</sub> =0.5A	0.375			V
			0.430			
			0.510			
Forward voltage	V <sub>F3</sub>	I <sub>F</sub> =1A	0.62			V
Reverse current	I <sub>R1</sub>	V <sub>R</sub> =10V	75			μA
		V <sub>R</sub> =15V	20			μA
Reverse current	I <sub>R3</sub>	V <sub>R</sub> =20V	250			μA
			10			μA
Reverse current	I <sub>R4</sub>	V <sub>R</sub> =30V	130			μA
		V <sub>R</sub> =40V	20			μA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =0V,f=1MHz	170			pF

#### ■ Marking

NO.	KBR0520LW	KBR0530W	KBR0540W
Marking	SD	SE	SF

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

### ■ Typical Characteristics

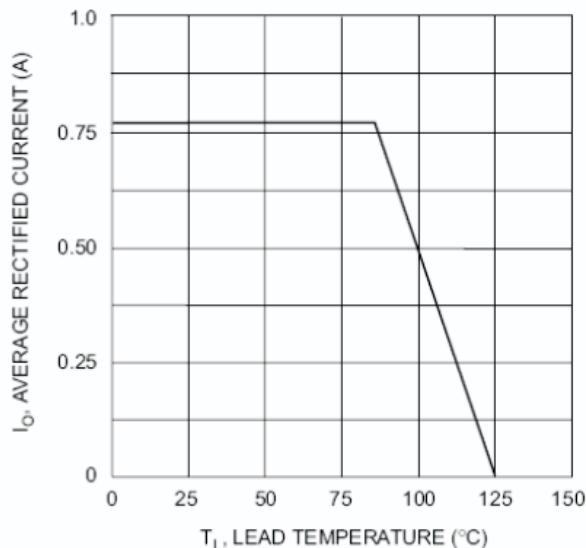


Fig.1 Forward Current Derating Curve

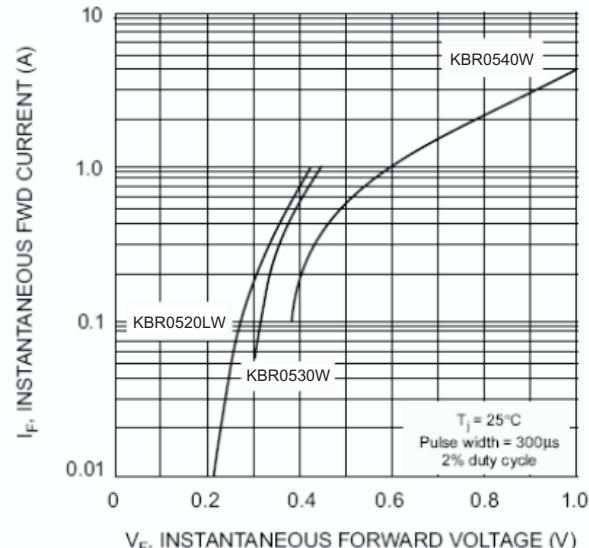


Fig.2 Typical Forward Characteristics

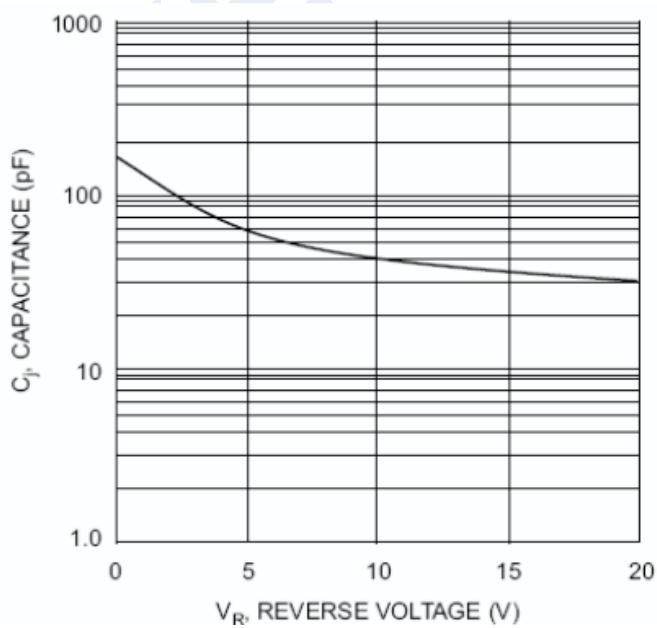


Fig.3 Typ.Junction Capacitance vs Reverse Voltage