

## K16WS

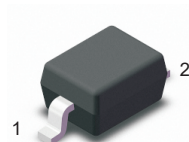
Schottky Barrier Diode



### FEATURES

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability

SOD-323



### Major Ratings and Characteristics

$I_{F(AV)}$	1.0A
$V_{RRM}$	60 V
$I_{FSM}$	10A
$V_F$	0.7V
$T_j \text{ max.}$	125 °C

### MAXIMUM RATINGS( Ta=25°C unless otherwise noted )

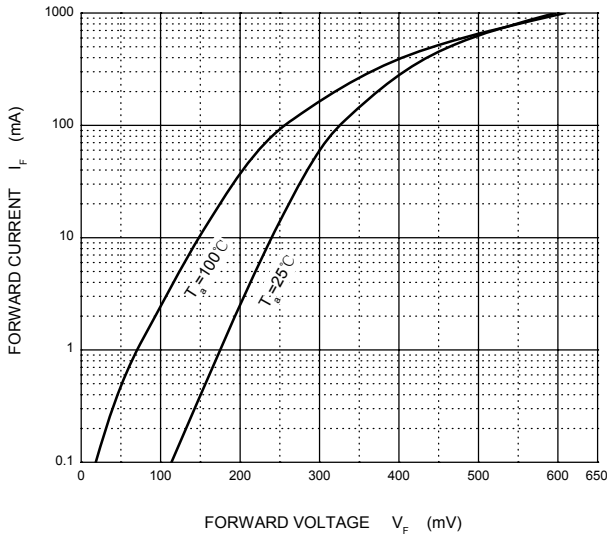
Symbol	Parameter	Value	Unit
$V_{RRM}$	Maximum recurrent peak reverse voltage	60	V
$V_{RMS}$	Maximum RMS voltage	42	
$V_{DC}$	Maximum DC blocking voltage	60	
$I_F$	Continuous forward current	1	A
$I_{FSM}$	Non-repetitive Peak forward surge current@t=8.3ms	10	
$P_{tot}$	Total power dissipation	250	mW
$R_{\theta JA}$	Thermal resistance junction to ambient air	400	°C/W
$T_J$	Junction temperature	125	°C
$T_{stg}$	storage temperature	-55~+150	°C

### ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

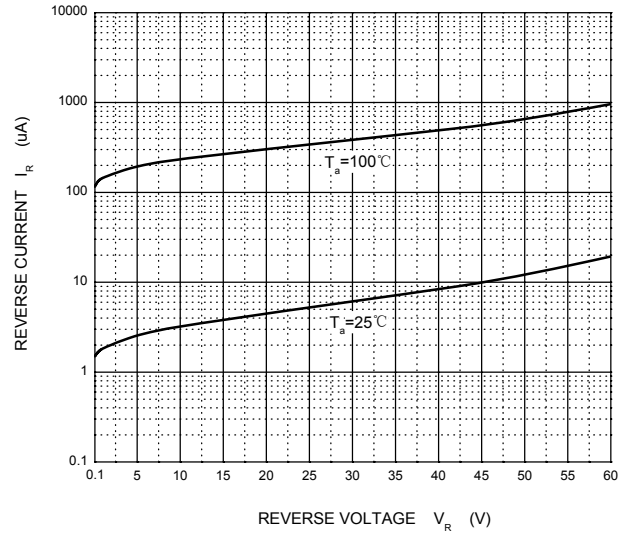
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum instantaneous forward voltage	$V_F$	$I_F=1A$			0.7	V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$V_R=60V$			0.1	mA
Total capacitance	$C_{tot}$	$V_R=4V, f=1MHz$			120	pF

**Typical Characteristics**

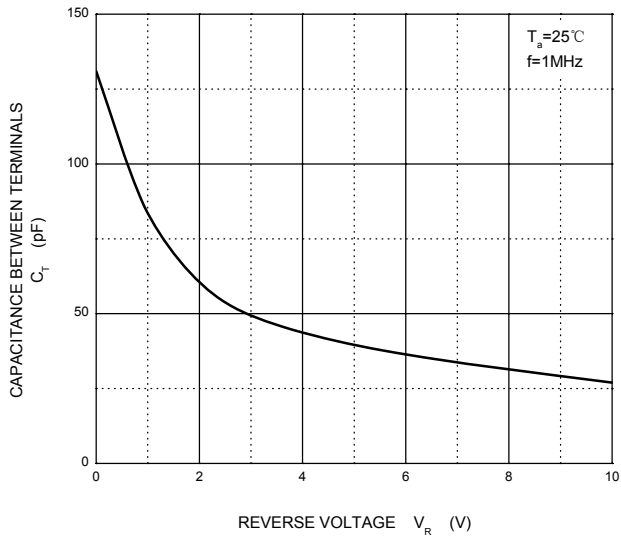
**Forward Characteristics**



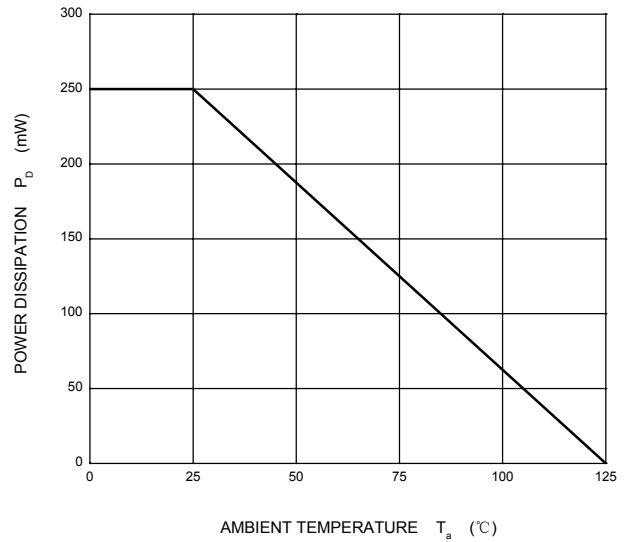
**Reverse Characteristics**



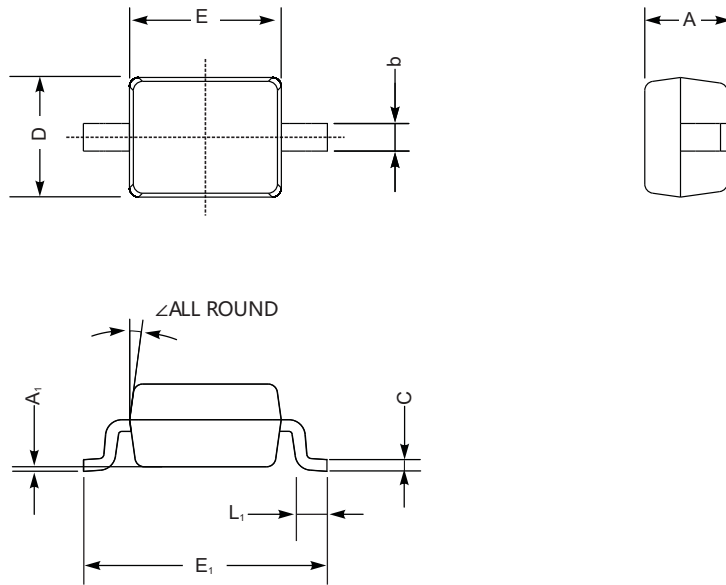
**Capacitance Characteristics**



**Power Derating Curve**



**Package Outline**



SOD-323 mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	