MSK4005

Schottky Barrier Diode

Reverse Voltage - 40V
Forward Current - 0.5A

Symbol

SOD-523

Features

- Forward current: $I_F \leq 0.5A$
- Reverse voltage: $VR \geq 40V$
- Very low forward voltage
- Ultra small and flat lead SMD plastic package

Marking:KV

Applications

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch mode power supply
- Reverse polarity protection
- Low power consumption applications

Electrical Characteristics (T_A=25°C)

Parameter		Symbol	Min	Typ	Max	Unit
Repetitive Peak Reverse Voltage@0.5mA		V_{RRM}	40	50		V
Average Forward Rectified Current		$I_{F(AV)}$			0.5	A
Forward Voltage Drop@I_F=0.5A	@25°C	V_F		0.44	0.49	V
Reverse Current at V_{RRM}@40V	@25°C	I_R		50	150	μA
Operating Temperature Range		T_J	-55		+125	°C
Storage Temperature Range		T_{STG}	-55		+150	°C

Typical Characteristics

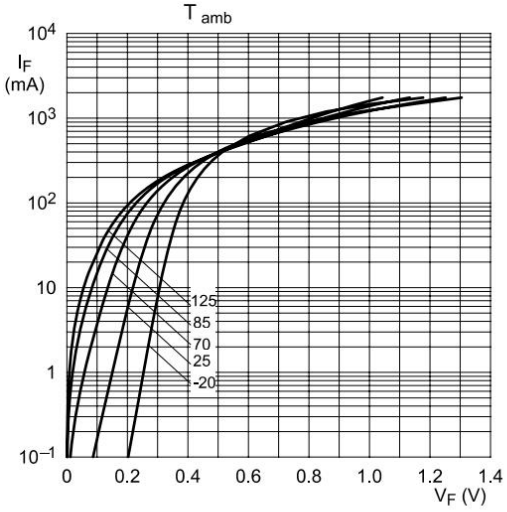


Fig 1. Forward current as a function of forward voltage; typical values

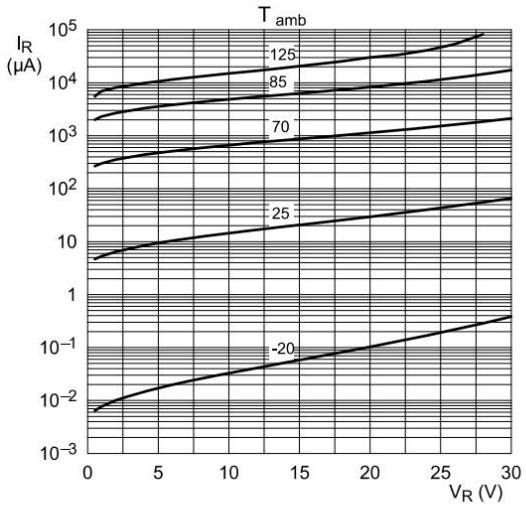
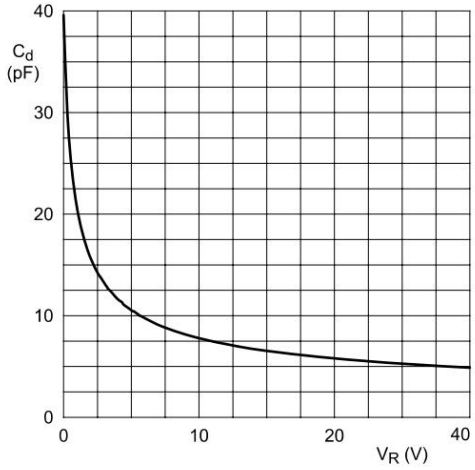


Fig 2. Reverse current as a function of reverse voltage; typical values



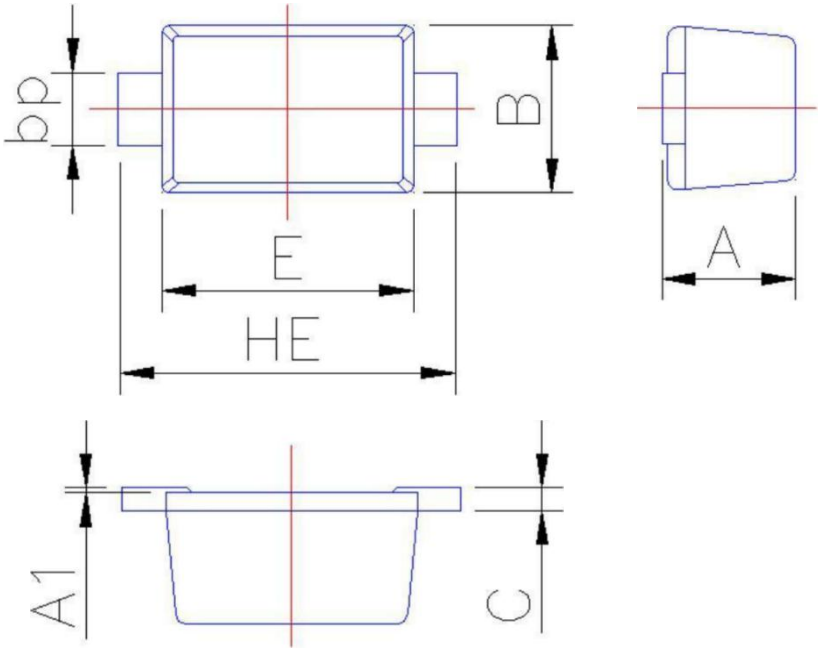
f = 1 MHz; T_{amb} = 25 C

Fig 3. Diode capacitance as a function of reverse voltage; typical values

Package Information

SOD-523

Dimensions in mm



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.75
A1	0	0.05
B	0.70	0.90
bp	0.25	0.40
C	0.09	0.15
E	1.15	1.25
HE	1.50	1.70

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