

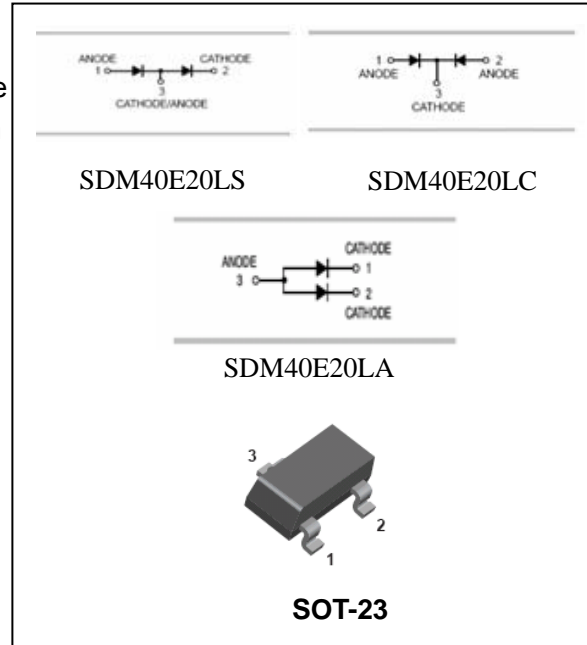
DUAL SURFACE MOUNT SCHOTTKY BARRIER DIODE SDM40E20LS /C /A

FEATURES

- Very Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance



Lead-free



ORDERING INFORMATION

Type No.	Marking	Package Code
SDM40E20LS /C /A	KSW/KWS/KWA	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
Working Peak Reverse Voltage	V_{RWM}	20	V
DC Reverse Voltage	V_R	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Forward Continuous Current (Note 1)	I_{FM}	0.4	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	2	A
Power Dissipation	P_d	225	mW
Note1 Note2		300	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	444	°C/W
Note1 Note2		333	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	°C



DUAL SURFACE MOUNT SCHOTTKY BARRIER DIODE SDM40E20LS /C /A

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	20	-	-	V	$I_R = 0.5mA$
Forward Voltage	V_F	-	-	0.310 0.430	V	$I_F = 0.1A$ $I_F = 0.5A$
Reverse Leakage Current	I_R	-	-	100 250	μA	$V_R = 10V$ $V_R = 20V$
Total Capacitance	C_T	-	120	-	pF	$V_R = 0V, f = 1.0MHz$

Notes: 1. Device mounted on FR-5 1.0 x 0.75 x 0.062 inch PCB pad layout.

2. Device mounted on Alumina PCB, 0.4 inch x 0.3 inch x 0.024 inch pad layout.

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

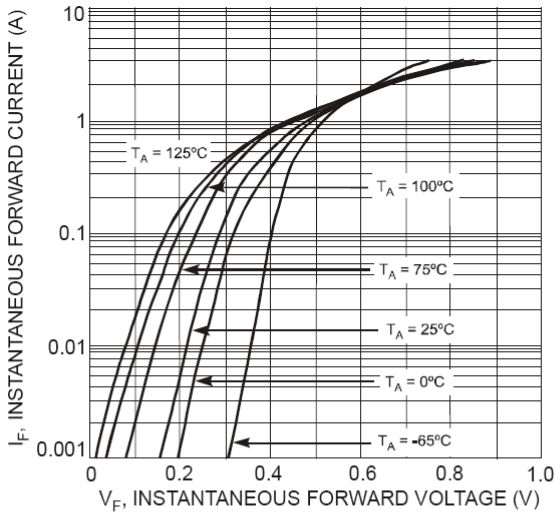


Fig. 1 Typical Forward Characteristics, Per Element

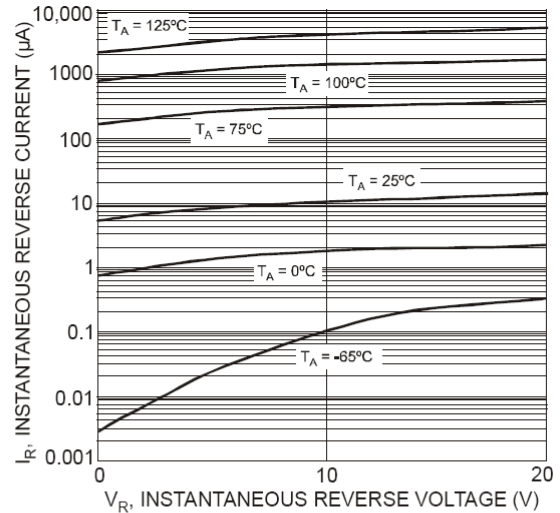


Fig. 2 Typical Reverse Characteristics, Per Element

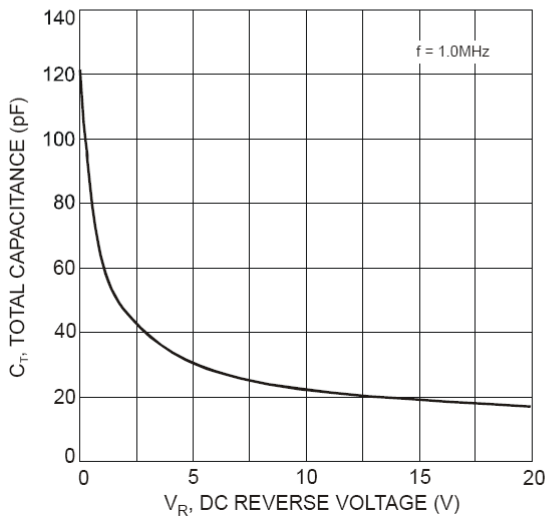


Fig. 3 Total Capacitance vs. Reverse Voltage, Per Element

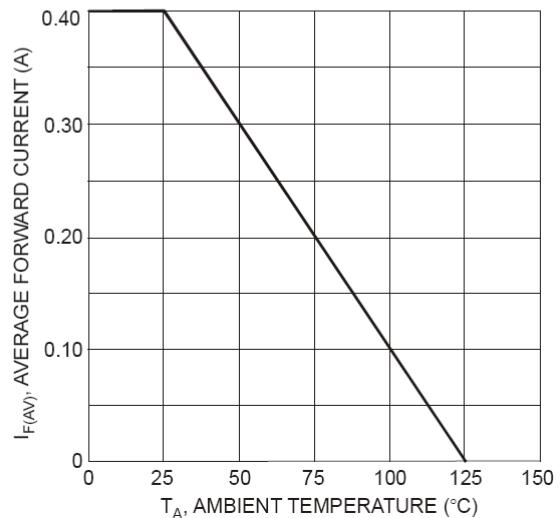


Fig. 4 Forward Current Derating Curve, Per Element

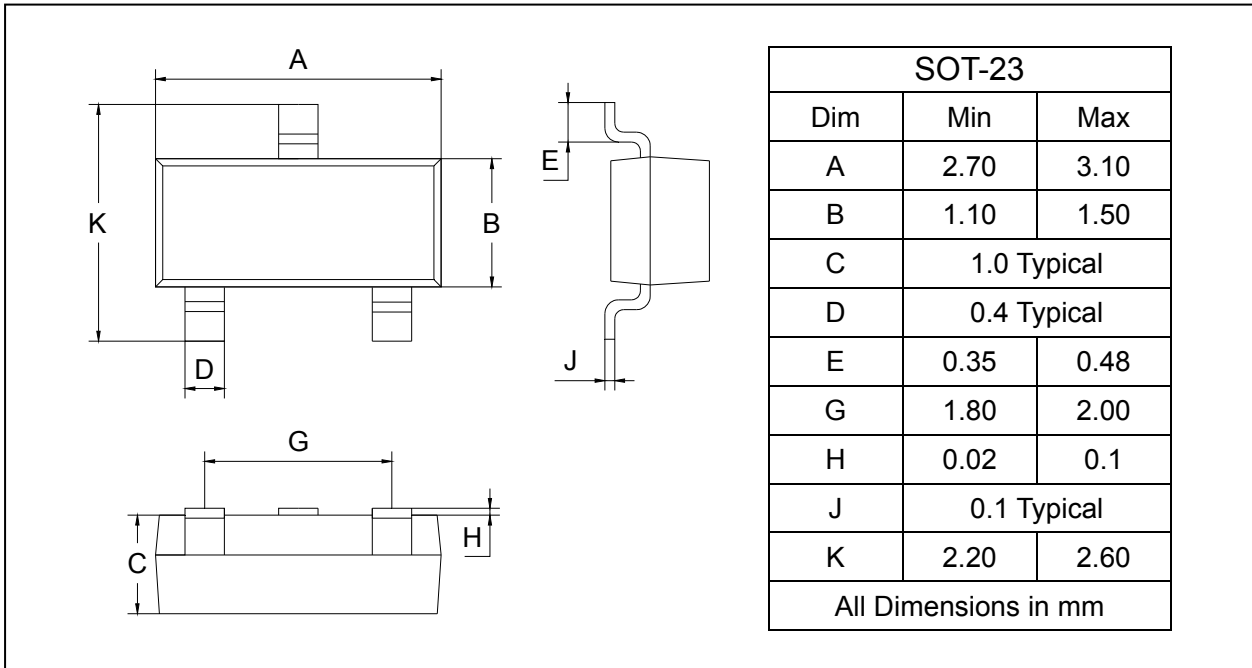


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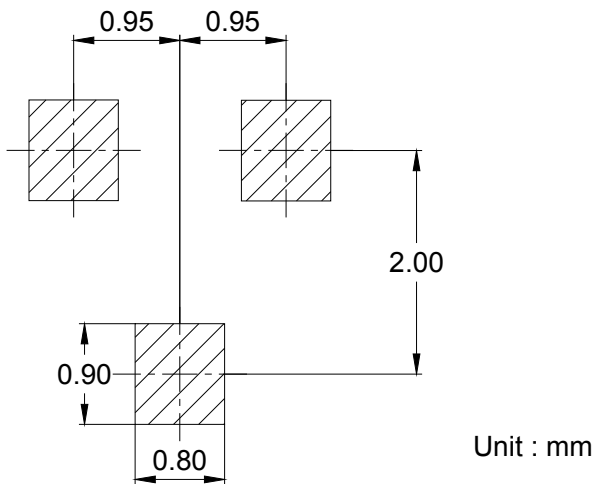
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
SDM40E20LS/C /A	SOT-23	3000/Tape&Reel