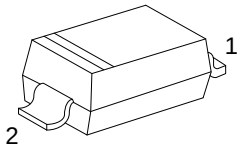
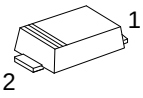
SD103AW

DIODE

SCHOTTKY BARRIER SWITCHING DIODE



SOD-123

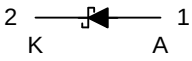


SOD-523

■ FEATURES

* Low Forward Voltage Drop
* Fast Switching
* Negligible Reverse Recovery Time
* Low Reverse Capacitance
* Designed for Surface Mount Application
* PN Junction Guard Ring for Transient and ESD Protection

■ SYMBOL



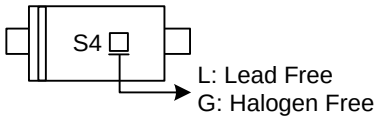
■ ORDERING INFORMATION

Order Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SD103AWL-CA2-R	SD103AWG-CA2-R	SOD-123	A	K	Tape Reel
SD103AWL-CC2-R	SD103AWG-CC2-R	SOD-523	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

SD103AWG-CA2-R (1) Packing Type (2) Package Type (3) Green Package	(1) R: Tape Reel (2) CA2: SOD-123, CC2: SOD-523 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Single Diode @ T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Maximum repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum DC Blocking Voltage	V_R	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
Maximum RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	350	mA
Non-Repetitive Peak Forward Current at $t_P \leq 1.0s$	I_{FSM}	1.5	A
Power Dissipation	P_D	400	mW
Storage Temperature	T_{STG}	-65 ~ +125	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Thermal Resistance Junction to Ambient	θ_{JA}	300	°C/W

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage Drop	V_F	I_F=20mA			0.37	V
		I_F=200mA			0.60	V
Reverse Breakdown Voltage	BV_R	I_R=10μA	40			V
Peak Reverse Leakage Current	I_{RM}	V_R=30V			5.0	μA
Typical Reverse Recovery Time	t_{RR}	I_F=I_R= 50~200mA, R_L=100Ω recover to 0.1x I_R,		10		ns
Typical Junction Capacitance	C_T	V_R=0V, f=1.0MHz		50		pF

■ TYPICAL CHARACTERISTICS