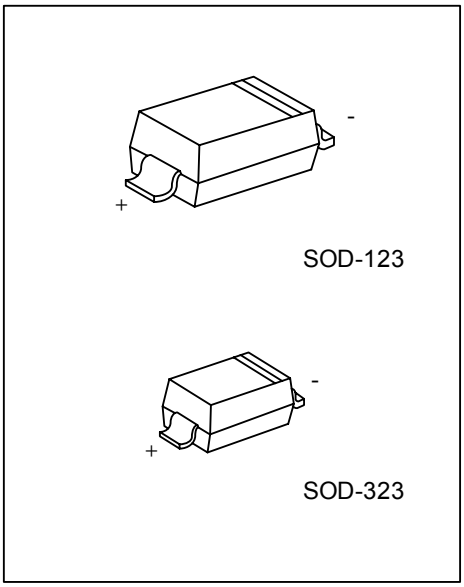
# SD106WS

***schottky diode***

## SCHOTTKY DIODES




*Pb-free plating product number: SD106WSL

### ■ FEATURES

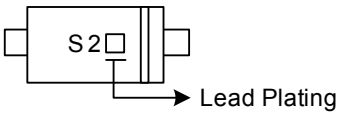
* Low turn-on Voltage Vd
* Built –in PN Junction Guard Ring

### ■ ORDERING INFORMATION

| Order Number | | Package | Packing |
|---|---|---|---|
| Normal | Lead Free Plating | | |
| SD106WS-CA2-R | SD106WSL-CA2-R | SOD-123 | Tape Reel |
| SD106WS-CB2-R | SD106WSL-CB2-R | SOD-323 | Tape Reel |

| | |
|---|---|
| SD106WSL-CA2-R<br>(1)Packing Type<br>(2)Package Type<br>(3)Lead Plating | (1) R: Tape Reel<br>(2) CA2: SOD-123, CB2: SOD-323<br>(3) L: Lead Free Plating Blank: Pb/Sn |

### ■ MARKING



## ■ ABSOLUTE MAXIMUM RATINGS (Single Diode @$T_A$=25℃)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Maximum non-repetitive Peak Reverse Voltage | $V_{RM}$ | 30 | V |
| Peak Forward Current | $I_{FM}$ | 200 | mA |
| Non-repetitive Peak Forward Surge Current @ $t_p$=10ms | $I_{FSM}$ | 1 | A |
| Power Dissipation | $P_D$ | 250 | mW |
| Junction Temperature | $T_J$ | 150 | ℃ |
| Storage Temperature | $T_{STG}$ | -65~+150 | ℃ |

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

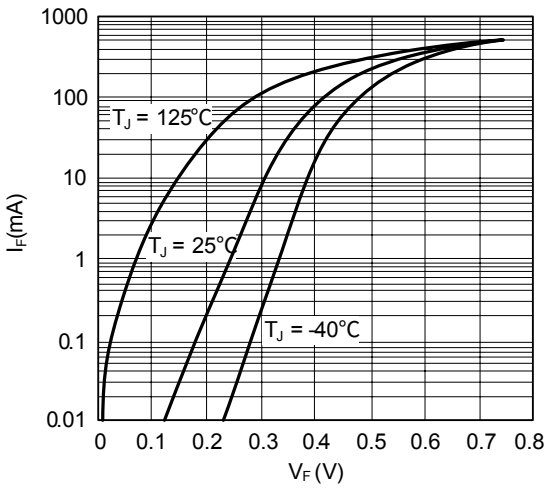
| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Thermal Resistance Junction to Ambient | $\theta_{JA}$ | 500 | ℃/W |

## ■ ELECTRICAL CHARACTERISTICS ($T_A$=25℃)

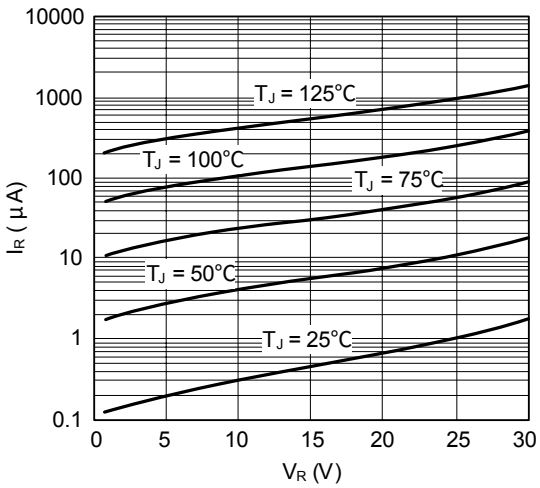
| PARAMETER | SYMBOL | CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$=2mA | | 260 | | mV |
| | | $I_F$=15mA | | 320 | | mV |
| | | $I_F$=100mA | | 420 | | mV |
| | | $I_F$=200mA | | 490 | 550 | mV |
| Reverse Breakdown Voltage | $BV_R$ | $I_R$=100μA | 30 | | | V |
| Peak Reverse Leakage Current | $I_R$ | $V_R$=30V | | | 5 | μA |
| Typical Junction Capacitance | $C_T$ | $V_R$=10V, f=1MHz | | 50 | 15 | pF |

## ■ TYPICAL CHARACTERISTICS

Forward Characteristics




Reverse Characteristics




Capacitance $C_{IN}$ vs. Reverse Voltage $V_R$