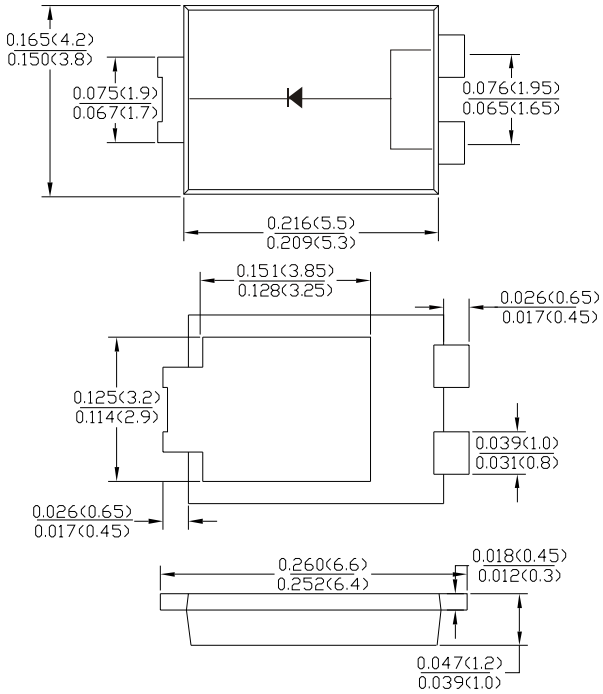
# SL0540 THRU SL05200

**5 .0A Surface Mount Schottky Barrier Rectifiers**

## Features

· Schottky Barrier Chip
· High Thermal Reliability
· Patented Super Barrier Rectifier Technology
· High Forward Surge Capability
· Ultra Fow Power Loss,High Efficiency
· Excellent High Temperature Stability
· Plastic material-UL flammability 94V-0

## TO-277B




dimensions in inches and (millimeters)

## Mechanical Data

· Case: TO-277, molded plastic
· Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
· Polarity:Cathode Band
· Mounting Position:Any
· Marking:Type Number
· Lead Free:For RoHS/Lead Free Version

## Maximum Ratings and Electrical Characteristics @$T_A$ =25℃ unless otherwise specified

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

| Parameter | Symbol | SL 0540 | SL 0545 | SL 0550 | SL 0560 | SL 0580 | SL 05100 | SL 05150 | SL 05200 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC blocking voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_{DC}$ | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| RMS Rectified Voltage | $V_{R(RMS)}$ | 28 | 32 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Average Rectified Output Current (Note1) | $I_O$ | 5.0 | | | | | | | | A |
| Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2) | $I_{FSM}$ | 130 | | | | | | | | A |
| Forward Voltage Drop $T_A$ =25℃ @IF=5A | $V_{FM}$ | 0.52 | | 0.68 | | 0.82 | | 0.85 | 0.90 | V |
| Peak Reverse Curent $T_A$=25 ℃<br>At Rated DC Blocking Voltage $T_A$=100 ℃ | $I_R$ | 0.3<br>15 | | | | | | | | mA |
| Typical Thermal Resistance<br>Junctionto Ambient | $R_{\theta JA}$<br>$R_{\theta JL}$ | 80<br>15 | | | | | | | | ℃/W |
| Operating junction temperature range | $T_J$ | -55 to +150 | | | | | | | | ℃ |
| storage temperature range | $T_{STG}$ | -55 to +150 | | | | | | | | ℃ |

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.
2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

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**5.0A Surface Mount Schottky Barrier Rectifiers**

Fig.1 - Forward Current Derating Curve

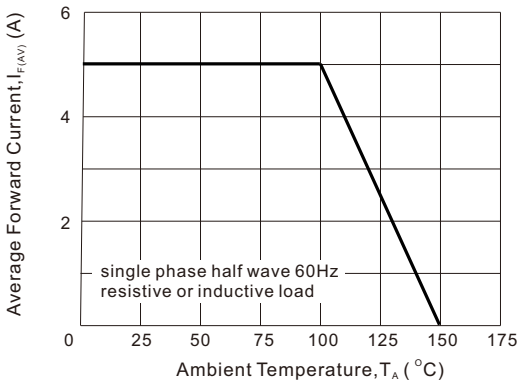



Fig2 : Instantaneous Forward Voltage

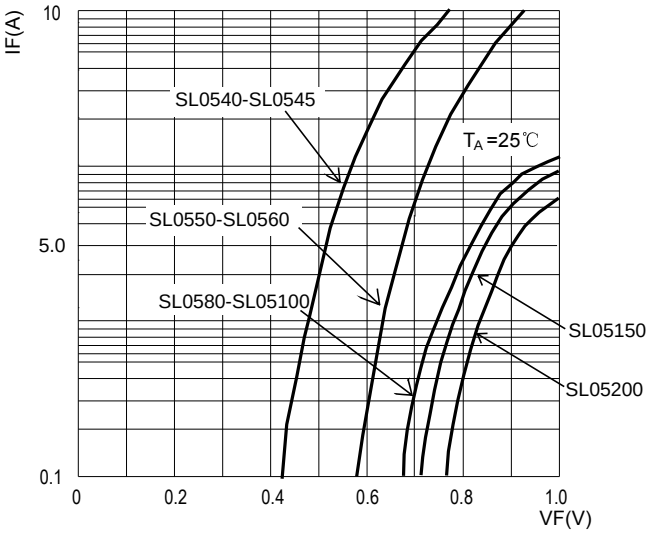



Fig3: Surge Forward Current Capadility

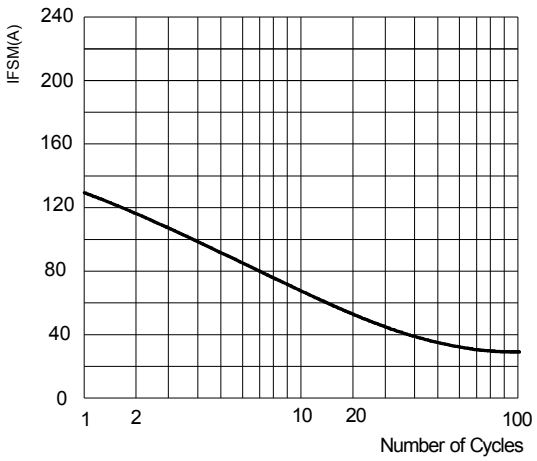



Fig4: Typical Reverse Characteristics

