



Micro Commercial Components



Micro Commercial Components  
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## SK152 THRU SK1510

### Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Current Capability With Low Forward Voltage
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 20°C/W Junction To Lead

| MST Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| SK152           | SK152          | 20V                                    | 14V                 | 20V                         |
| SK153           | SK153          | 30V                                    | 21V                 | 30V                         |
| SK1535          | SK1535         | 35V                                    | 24.5V               | 35V                         |
| SK154           | SK154          | 40V                                    | 28V                 | 40V                         |
| SK1545          | SK1545         | 45V                                    | 31.5V               | 45V                         |
| SK155           | SK155          | 50V                                    | 35V                 | 50V                         |
| SK156           | SK156          | 60V                                    | 42V                 | 60V                         |
| SK158           | SK158          | 80V                                    | 56V                 | 80V                         |
| SK1510          | SK1510         | 100V                                   | 70V                 | 100V                        |

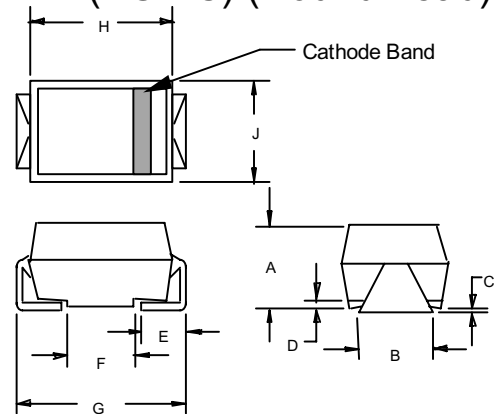
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                   |             |              |                                                        |
|-------------------------------------------------------------------|-------------|--------------|--------------------------------------------------------|
| Average Forward Current                                           | $I_{F(AV)}$ | 15.0A        | $T_L = 95^\circ\text{C}$                               |
| Peak Forward Surge Current                                        | $I_{FSM}$   | 275A         | 8.3ms, half sine                                       |
| Maximum Instantaneous Forward Voltage<br>SK152-1545<br>SK155-1510 | $V_F$       | .55V<br>.85V | $I_{FM} = 15.0\text{A};$<br>$T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage           | $I_R$       | 1mA<br>20mA  | $T_J = 25^\circ\text{C}$<br>$T_J = 100^\circ\text{C}$  |
| Typical Junction Capacitance                                      | $C_J$       | 500pF        | Measured at 1.0MHz, $V_R=4.0\text{V}$                  |

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

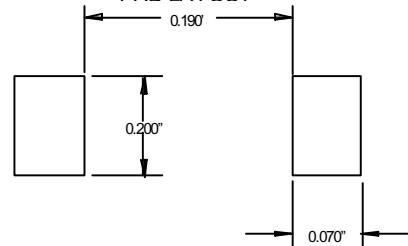
## 15 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AB (HSMC) (Round Lead)



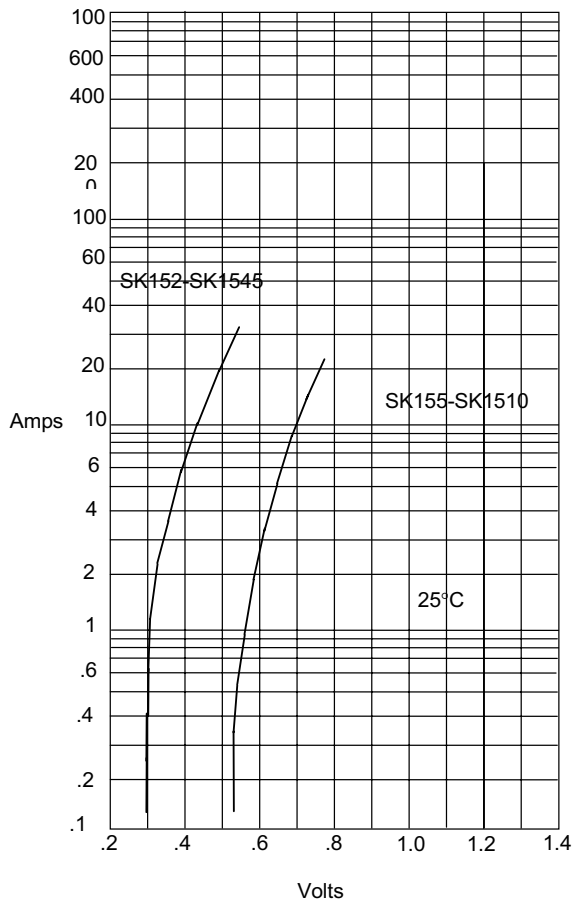
| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .200   | .214 | 5.08 | 5.43 |      |
| B   | .177   | .203 | 4.70 | 5.30 |      |
| C   | .002   | .005 | .05  | .13  |      |
| D   | —      | .02  | —    | .51  |      |
| E   | .047   | .056 | 1.20 | 1.42 |      |
| F   | .168   | .179 | 4.27 | 4.55 |      |
| G   | .309   | .322 | 7.85 | 8.18 |      |
| H   | .239   | .243 | 6.08 | 6.18 |      |
| J   | .234   | .240 | 5.95 | 6.10 |      |

#### SUGGESTED SOLDER PAD LAYOUT

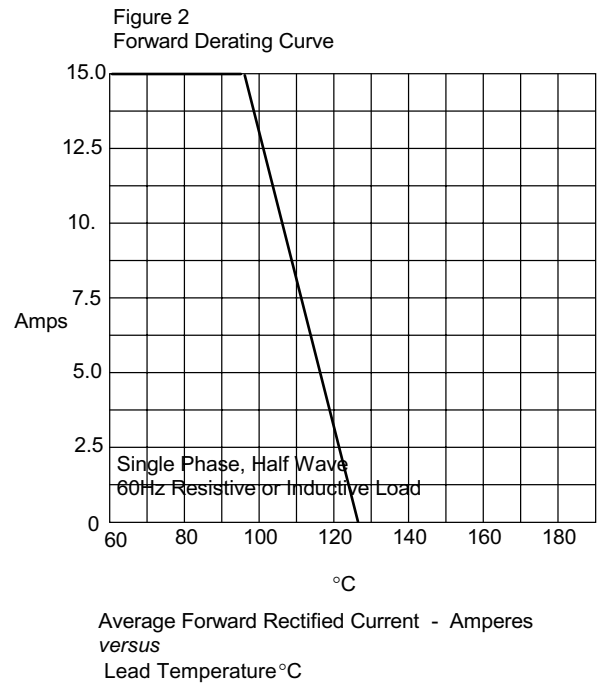


# SK152 thru SK1510

Figure 1  
Typical Forward Characteristics

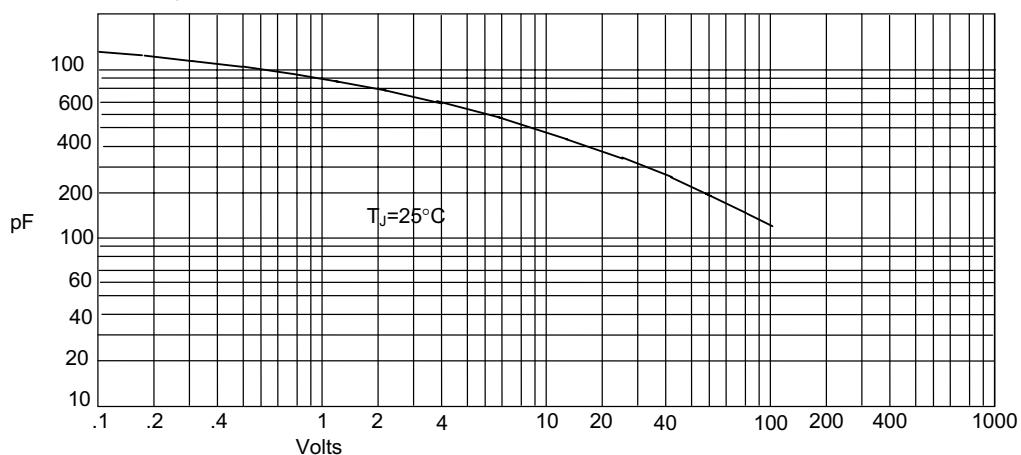


Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes  
*versus*  
Lead Temperature °C

Figure 3  
Junction Capacitance



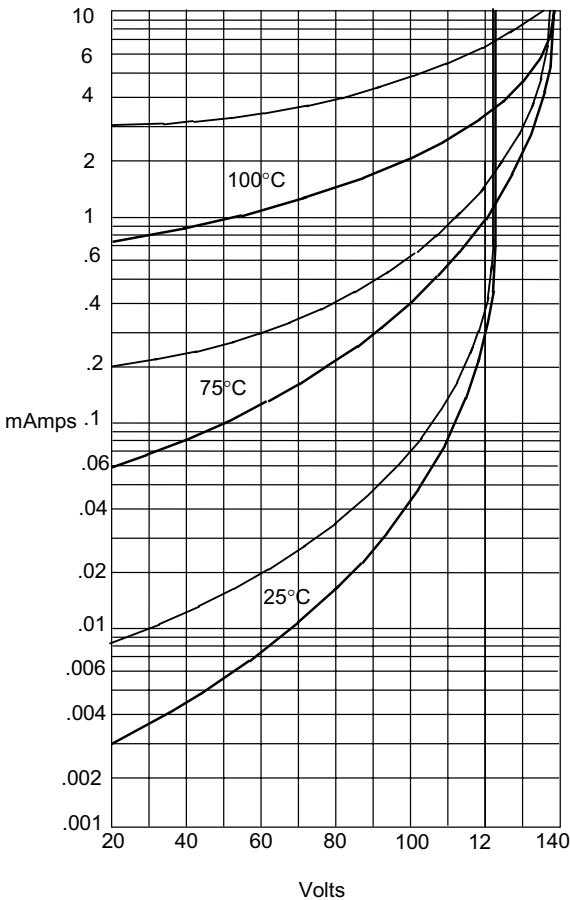
Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

# SK152 thru SK1510

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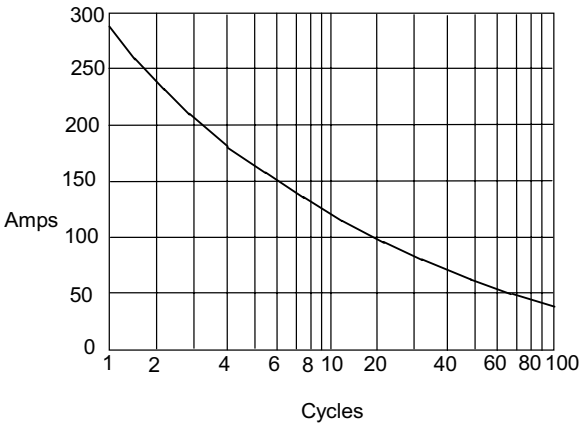
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Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles

SK152-SK1545 ———  
SK155-SK1510 ———

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**Ordering Information :**

| Device         | Packing                 |
|----------------|-------------------------|
| Part Number-TP | Tape&Reel: 1.5Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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