

**Obsolete**



Micro Commercial Components



Micro Commercial Components  
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# SMD12HE THRU SMD120HE

## 1 Amp Schottky Rectifiers 20 - 200 Volts

### Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1)("P" Suffix designates Compliant. See ordering information)
- High surge forward current capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Operating Temperature: SMD12HE~SMD14HE: -55°C to +125°C  
SMD15HE~SMD120HE: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Lead

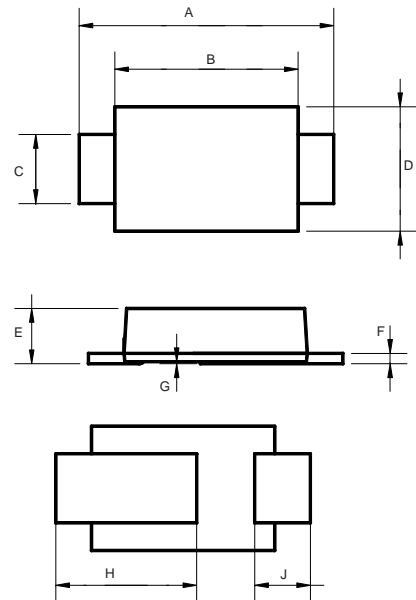
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SMD12HE            | S12L           | 20V                                    | 14V                 | 20V                         |
| SMD13HE            | S13L           | 30V                                    | 21V                 | 30V                         |
| SMD14HE            | S14L           | 40V                                    | 28V                 | 40V                         |
| SMD15HE            | S15L           | 50V                                    | 35V                 | 50V                         |
| SMD16HE            | S16L           | 60V                                    | 42V                 | 60V                         |
| SMD18HE            | S18L           | 80V                                    | 56V                 | 80V                         |
| SMD110HE           | S110L          | 100V                                   | 70V                 | 100V                        |
| SMD115HE           | S115L          | 150V                                   | 105V                | 150V                        |
| SMD120HE           | S120L          | 200V                                   | 140V                | 200V                        |

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

|   |             |         |  |       |
|---|-------------|---------|--|-------|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A    | $T_a=100^\circ\text{C}$                    |       |
| Peak Forward Surge Current                              | $I_{FSM}$   | 30A     | 8.3ms, half sine                           |       |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 12~14   | $I_{FM} = 2.0A;$<br>$T_a=25^\circ\text{C}$ |       |
|   |             | 15~16   |  | 0.70V |
|   |             | 18~110  |  | 0.85V |
|   |             | 115~120 |  | 0.90V |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 0.5mA   | $T_a = 25^\circ\text{C}$                   |       |

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

### SOD-123HE

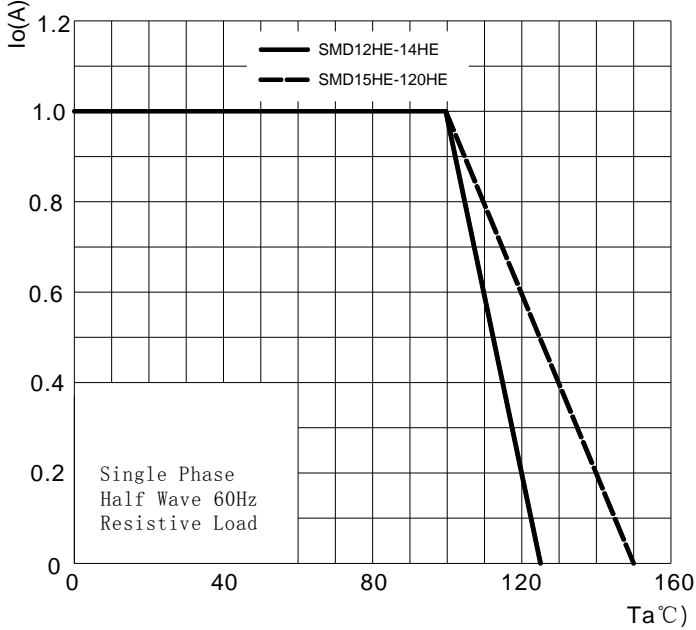


| DIM | DIMENSIONS |      |      |      | NOTE |
|-----|------------|------|------|------|------|
|     | INCHES     |      | MM   |      |      |
|     | MIN        | MAX  | MIN  | MAX  |      |
| A   | .140       | .156 | 3.55 | 3.95 |      |
| B   | .100       | .112 | 2.55 | 2.85 |      |
| C   | .035       | .043 | 0.90 | 1.10 |      |
| D   | .067       | .075 | 1.70 | 1.90 |      |
| E   | .028       | .035 | 0.70 | 0.90 |      |
| F   | .004       | .008 | 0.10 | 0.20 |      |
| G   | .001       | .002 | 0.02 | 0.05 |      |
| H   | .067       | .098 | 1.70 | 2.50 |      |
| J   | .016       | .047 | 0.40 | 1.20 |      |

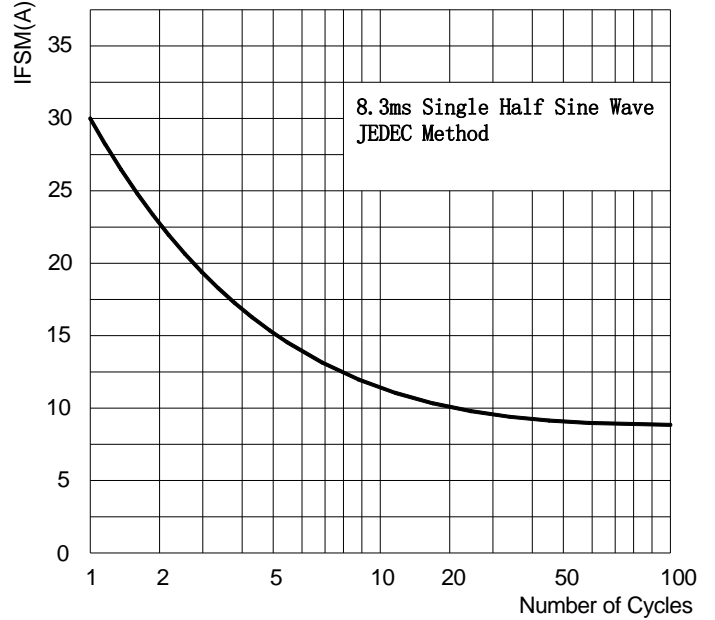
[www.mccsemi.com](http://www.mccsemi.com)

**Characteristics(Typical)**

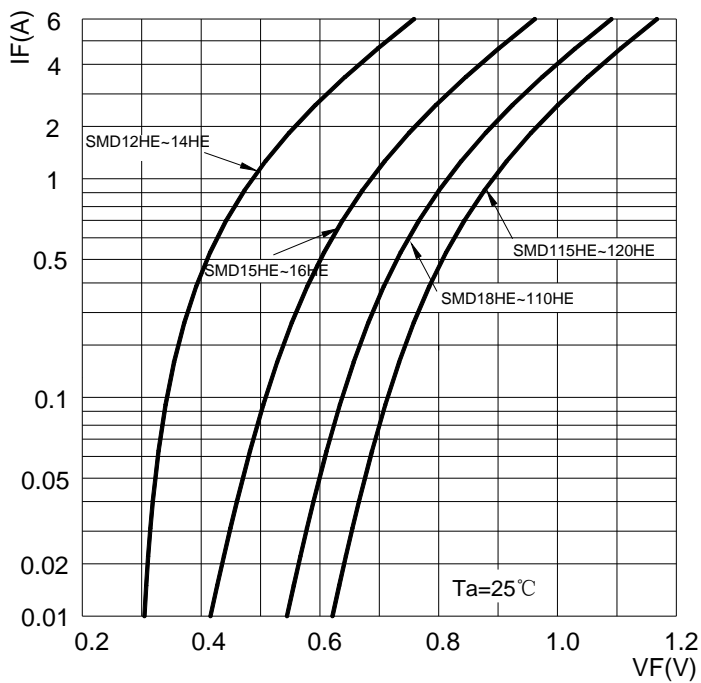
**FIG1:Io-Ta Curve**



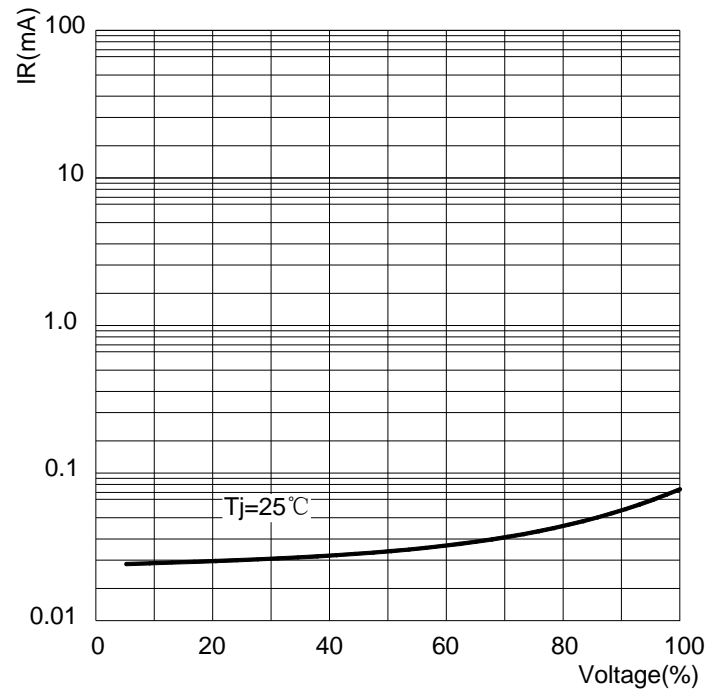
**FIG2:Surge Forward Current Capadility**



**FIG3: Forward Voltage**



**FIG4:Typical Reverse Characteristics**





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## Ordering Information :

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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

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