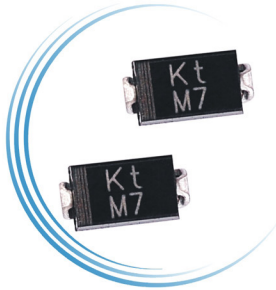


Kingtronics® International Company

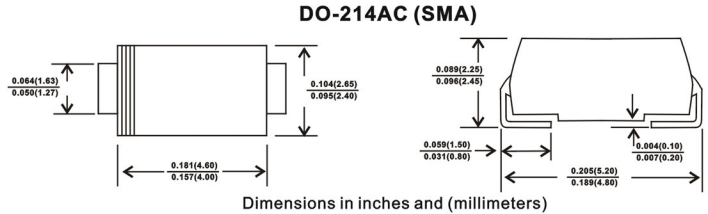
Website : www.kingtronics.com Email : info@kingtronics.com Tel : (852) 8106 7033 Fax : (852) 8106 7099

ISO Manufacturer Since 1990



M7

SURFACE MOUNT GENERAL RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

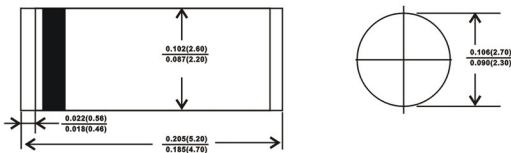
| PARAMETER | SYMBOL | M1 | M2 | M3 | M4 | M5 | M6 | M7 | UNITS |
|--|----------------------------------|--------------|-----|-----|-----|-----|-----|------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current at TL=110°C | I _(AV) | 1.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30.0 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @1.0A | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=125°C | I _R | 5.0 50.0 | | | | | | | μA |
| Typical Junction Capacitance (NOTE 1) | C _J | 15.0 | | | | | | | pF |
| Typical Thermal Resistance (NOTE 2) | R _{θJA} | 75.0 | | | | | | | °C/W |
| Operating Junction and Storage Temperature Range | T _J ,T _{STG} | -55 to + 150 | | | | | | | °C |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2. P.C.B. mounted with 0.2"x0.2" (5.0x5.0mm) copper pad areas

SURFACE MOUNT SILICON RECTIFIER

SM4007

DO-213AB (MELF)



Dimensions in inches and (millimeters)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| PARAMETER | SYMBOL | SM4001 | SM4002 | SM4003 | SM4004 | SM4005 | SM4006 | SM4007 | UNITS |
|--|--------------------|--------------|--------|--------|--------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @TA = 75°C | I _{F(AV)} | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 30 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @1.0A | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C | I _R | 10 50 | | | | | | | μA |
| Typical Thermal Resistance (Note) | R _{θJA} | 75 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to + 150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to + 150 | | | | | | | °C |

Note: Thermal Resistance from Junction to case. Mount on 0.2"x0.2"Cu-pad on P.C.B..

Notes : Specification are subject to change without notice. Please refer to our website : www.kingtronics.com

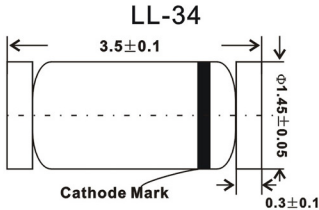
Kingtronics® International Company

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Inspired by innovation

SILICON EPITAXIAL PLANAR SWITCHING DIODE

LL4148



Glass case MiniMELF Dimensions in mm

FEATURES :

- ◆ Fast Switching Speed
- ◆ Surface Mount Package
- ◆ General Purpose Rectification
- ◆ Silicon Epitaxial Planar Construction
- ◆ Glass Package Version for High Reliability



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

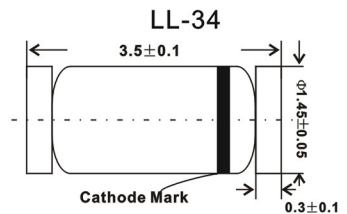
| PARAMETER | SYMBOL | VALUE | UNITS |
|--|-----------|-------------------|-------|
| Peak Reverse Voltage | V_{RWM} | 100 | V |
| Reverse Voltage | V_R | 75 | V |
| Average Rectified Forward Current | $I_F(AV)$ | 200 | mA |
| Non-repetitive Peak Forward Surge Current at $t = 1$ s | I_{FSM} | 0.5 | A |
| at $t = 1$ ms | | 1 | |
| at $t = 1$ μ s | | 4 | |
| Power Dissipation | P_{tot} | 500 ¹⁾ | mW |
| Junction Temperature | T_J | 175 | °C |
| Junction Temperature | T_{stg} | -65 to + 175 | °C |

Note 1: Valid provided that electrodes are kept at ambient temperature.

BZV55C SERIES SILICON PLANAR ZENER DIODE

FEATURES :

- ◆ Low Zener Impedance
- ◆ Low Regulation Factor
- ◆ Glass Passivated Junction
- ◆ Zener Voltage: 2.4-180V
- ◆ Peak Pulse Power: 500mW



Glass case MiniMELF Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | VALUE | UNITS |
|--|-----------------|-------------|-------|
| Power Dissipation at $T_{amb}=25^\circ\text{C}$ (Note 1) | P_{tot} | 500 | mW |
| Junction Temperature | T_J | 200 | °C |
| Storage Temperature Range | T_{STG} | -65 to +200 | °C |
| Thermal Resistance Junction Ambient(Note 1) | $R_{\theta JA}$ | 0.3 | K/mW |
| Forward Voltage at $I_F=10\text{mA}$ | V_F | 0.9 | V |

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Notes : Specification are subject to change without notice. Please refer to our website : www.kingtronics.com