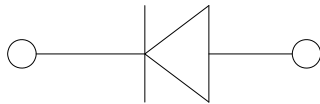


Low profile package
Ideal for automated placement
Glass passivated chip junction
High forward surge capability
Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.



Package: DO-214AB (SMC)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
Polarity: Color band denotes the cathode end

($T_a=25^\circ\text{C}$ Unless otherwise specified)

| Device marking code | | | GS10A | GS10B | GS10D | GS10G | GS10J | GS10K | GS10M |
|---|-----------|----------------------|------------|-------|-------|-------|-------|-------|-------|
| Maximum Repetitive peak reverse voltage | V_{RRM} | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage | V_{RMS} | V | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| Maximum DC Blocking Voltage | V_{DC} | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Rectified Output Current @60Hz sine wave, Resistance load, TL (FIG.1) | I_o | A | 10 | | | | | | |
| Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$ | I_{FSM} | A | 200 | | | | | | |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^\circ\text{C}$ | | | 400 | | | | | | |
| Current squared time @1ms t 8.3ms $T_j=25^\circ\text{C}$ | I^2t | A^2s | 166 | | | | | | |
| Storage Temperature | T_{stg} | | -55 ~ +150 | | | | | | |
| Junction Temperature | T_j | | -55 ~ +150 | | | | | | |

($T_a=25^\circ\text{C}$ Unless otherwise specified)

| Maximum instantaneous forward voltage | V_F | V | $I_{FM}=10\text{A}$ | 1.1 | | | | | |
|---|-------|---------------|---|-----|--|--|--|--|--|
| Maximum DC reverse current at rated DC blocking voltage | I_R | μA | $T_j=25$ | 5 | | | | | |
| | | | $T_j=125$ | 100 | | | | | |
| Typical junction capacitance | C_j | pF | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | 55 | | | | | |



($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

| Typical Thermal resistance | R J-A(1) | /W | 50 | | | | | | |
|----------------------------|----------|----|----|--|--|--|--|--|--|
| | R J-L(1) | | 10 | | | | | | |
| | R J-C(1) | | 8 | | | | | | |

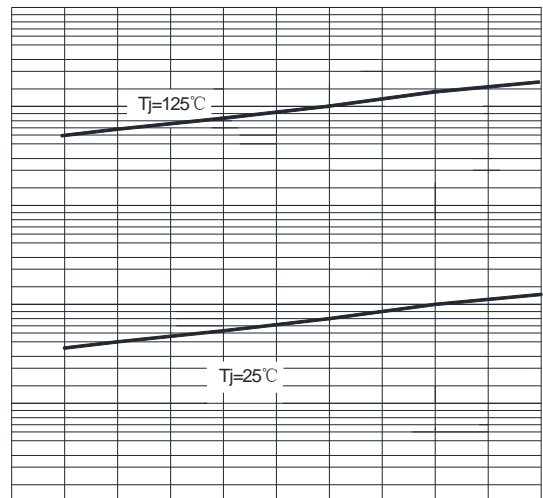
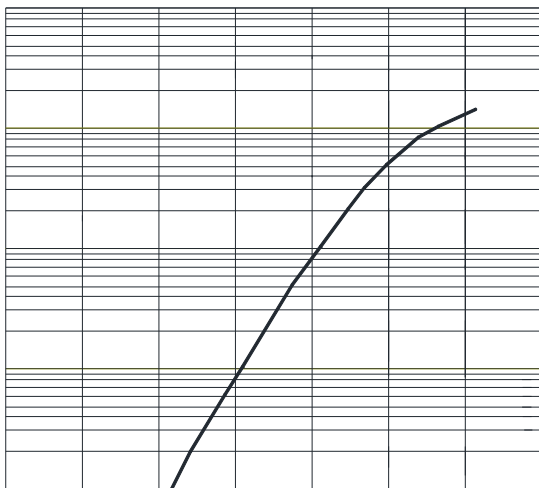
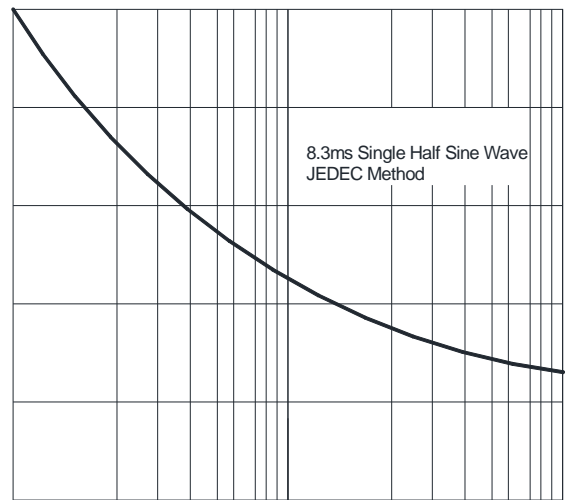
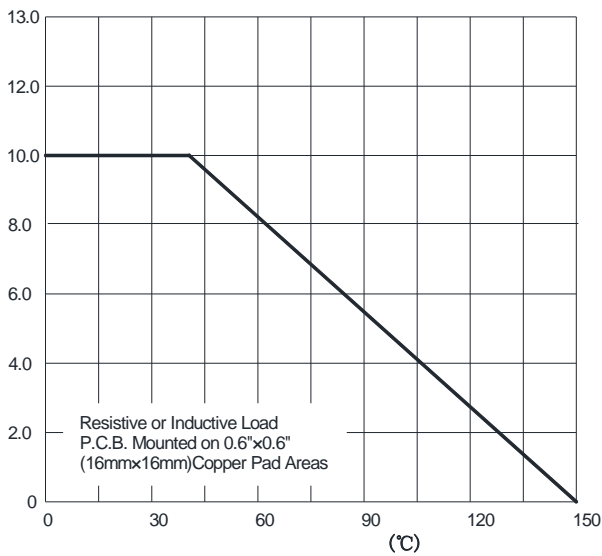
Note(1)

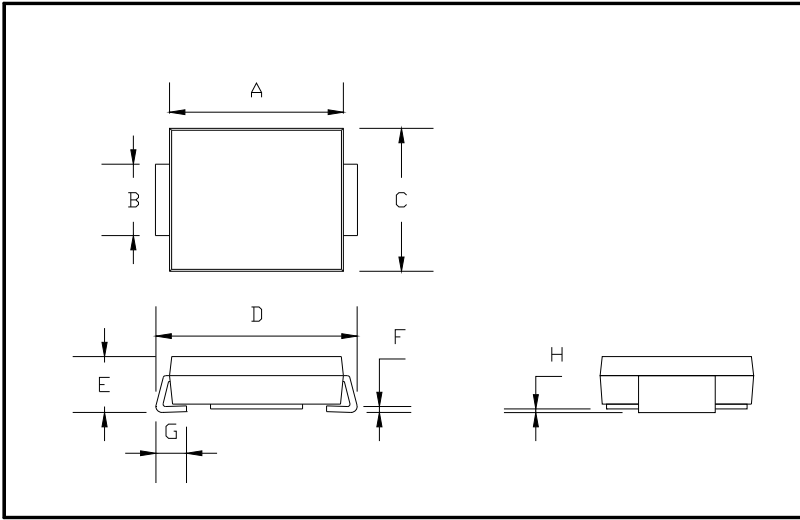
Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

(Example)

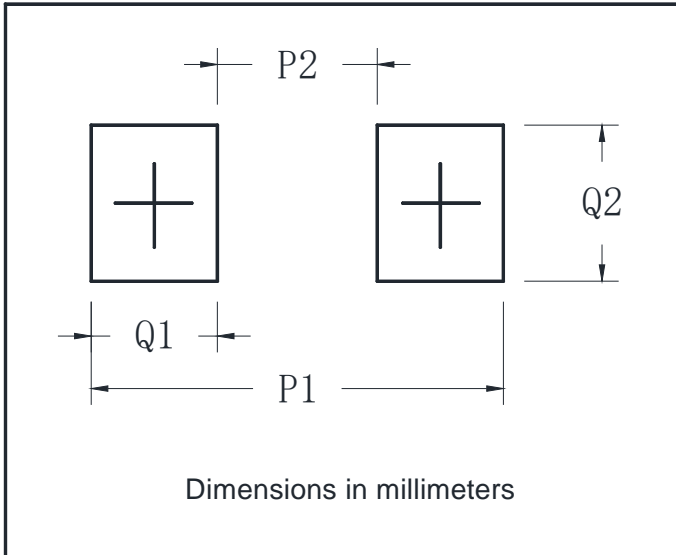
| F1 | Approximate 0.261 | 3000 | / | 42000 | 13" reel | | |
|----|-------------------|------|---|-------|----------|--|--|

(Typical)





| DO-214AB (SMC) | | |
|----------------|------|------|
| Dim | Min | Max |
| A | 6.60 | 7.11 |
| B | 2.85 | 3.27 |
| C | 5.59 | 6.22 |
| D | 7.75 | 8.13 |
| E | 1.99 | 2.61 |
| F | 0.15 | 0.31 |
| G | 0.76 | 1.52 |
| H | 0.05 | 0.20 |



| Dim | Min |
|-----|------|
| P1 | 9.9 |
| P2 | 3.84 |
| Q1 | 3.03 |
| Q2 | 3.82 |



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