

Low IR “E Series”

● **Surface-Mount**

| V _{RM} (V) | I _F (AV) (A) | Package Axial (Body Diameter/Lead Diameter) | Part Number | I _{FSM} (A) | T _j (°C) | T _{stg} (°C) | V _F (V) max | I _F (A) | I _R (mA) | I _{R(H)} (mA) | T _j (°C) | R _{th(j-l)} R _{th(j-c)} (°C/W) | Mass (g) |
|------------------------|----------------------------|---|-------------|-------------------------------|------------------------|--------------------------|------------------------------|-----------------------|--------------------------------------|--------------------------------------|------------------------|--|-------------|
| | | | | 50Hz Single Half Sine Wave | | | | | V _{R=V_{RM}} max | V _{R=V_{RM}} max | | | |
| 30 | 2.0 | Surface-Mount (SJP) | SJPE-H3* | 40 | -40 to +150 | | 0.55 | 2.0 | 0.2 | 70 | 150(Ta) | 20 | 0.072 |
| 40 | 2.0 | Surface-Mount (SJP) | SJPE-H4 | 40 | -40 to +150 | | 0.6 | 2.0 | 0.05 | 20 | 150 | 20 | 0.072 |

*Under development

● **Thru-Hole**

| V _{RM} (V) | I _F (AV) (A) | Package | Part Number | I _{FSM} (A) | T _j (°C) | T _{stg} (°C) | V _F (V) max | I _F (A) | I _R (mA) | I _{R(H)} (mA) | T _j (°C) | R _{th(j-l)} R _{th(j-c)} (°C/W) | Mass (g) |
|------------------------|----------------------------|---------------------|-------------|-------------------------------|------------------------|--------------------------|------------------------------|-----------------------|--------------------------------------|--------------------------------------|------------------------|--|-------------|
| | | | | 50Hz Single Half Sine Wave | | | | | V _{R=V_{RM}} max | V _{R=V_{RM}} max | | | |
| 80 | 20 | TO-220F(Center-tap) | FMEN-2208 | 120 | -40 to +150 | | 0.76 | 10 | 0.2 | 100 | 150 | 4.0 | 2.1 |
| | 30 | TO-220F(Center-tap) | FMEN-2308 | 150 | -40 to +150 | | 0.765 | 15 | 0.3 | 150 | 150 | 4.0 | 2.1 |
| 100 | 10 | TO-220F(Center-tap) | FMEN-210A | 100 | -40 to +150 | | 0.85 | 5.0 | 0.1 | 50 | 150 | 4.0 | 2.1 |
| | 15 | TO-220F(Center-tap) | FMEN-215A* | 100 | -40 to +150 | | 0.85 | 7.5 | 0.15 | 75 | 150 | 4.0 | 2.1 |
| | 20 | TO-220F(Center-tap) | FMEN-220A | 120 | -40 to +150 | | 0.85 | 10 | 0.2 | 100 | 150 | 4.0 | 2.1 |
| | 20 | TO-3PF(Center-tap) | FMEN-420A | 120 | -40 to +150 | | 0.85 | 10 | 0.2 | 100 | 150 | 2.0 | 6.5 |
| | 30 | TO-220F(Center-tap) | FMEN-230A | 150 | -40 to +150 | | 0.85 | 15 | 0.3 | 150 | 150 | 4.0 | 2.1 |
| | 30 | TO-262 | MPEN-230AF | 150 | -40 to +150 | | 0.90 | 15 | 0.25 | 125 | 150 | 1.5 | 1.55 |
| | 30 | TO-3PF(Center-tap) | FMEN-430A | 150 | -40 to +150 | | 0.85 | 15 | 0.3 | 150 | 150 | 2.0 | 6.5 |
| 150 | 10 | TO-220F(Center-tap) | FMEN-210B | 100 | -40 to +150 | | 0.92 | 5.0 | 0.1 | 25 | 150 | 4.0 | 2.1 |
| | 20 | TO-220F(Center-tap) | FMEN-220B | 120 | -40 to +150 | | 0.92 | 10 | 0.2 | 50 | 150 | 4.0 | 2.1 |
| | 20 | TO-3PF(Center-tap) | FMEN-420B | 120 | -40 to +150 | | 0.85 | 10 | 0.2 | 100 | 150 | 2.0 | 6.5 |
| | 30 | TO-220F(Center-tap) | FMEN-230B | 150 | -40 to +150 | | 0.92 | 15 | 0.3 | 75 | 150(Ta) | 4.0 | 2.1 |

*Under development

Low V_F/Low I_R Balance “J Series”

● **Surface-Mount**

| V _{RM} (V) | I _F (AV) (A) | Package | Part Number | I _{FSM} (A) | T _j (°C) | T _{stg} (°C) | V _F (V) max | I _F (A) | I _R (mA) | I _{R(H)} (mA) | T _j (°C) | R _{th(j-l)} R _{th(j-c)} (°C/W) | Mass (g) |
|------------------------|----------------------------|---------------------|-------------|-------------------------------|------------------------|--------------------------|------------------------------|-----------------------|--------------------------------------|--------------------------------------|------------------------|--|-------------|
| | | | | 50Hz Single Half Sine Wave | | | | | V _{R=V_{RM}} max | V _{R=V_{RM}} max | | | |
| 30 | 1.0 | Surface-Mount (SJP) | SJPJ-D3 | 30 | -40 to +150 | | 0.45 | 1.0 | 0.1 | 35 | 150 | 20 | 0.072 |
| | 2.0 | Surface-Mount (SJP) | SJPJ-H3* | 50 | -40 to +150 | | 0.45 | 2.0 | 0.2 | 70 | 150 | 20 | 0.072 |
| | 3.0 | Surface-Mount (SJP) | SJPJ-L3 | 60 | -40 to +150 | | 0.45 | 3.0 | 0.3 | 150 | 150 | 20 | 0.072 |

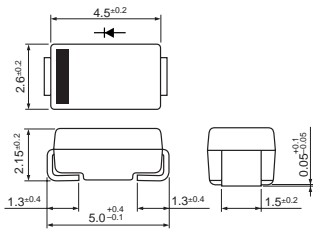
*Under development

● **Thru-Hole**

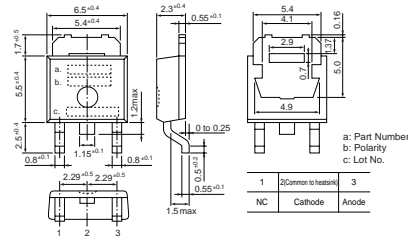
| V _{RM} (V) | I _F (AV) (A) | Package Axial (Body Diameter/Lead Diameter) | Part Number | I _{FSM} (A) | T _j (°C) | T _{stg} (°C) | V _F (V) max | I _F (A) | I _R (mA) | I _{R(H)} (mA) | T _j (°C) | R _{th(j-l)} R _{th(j-c)} (°C/W) | Mass (g) |
|------------------------|----------------------------|---|-------------|-------------------------------|------------------------|--------------------------|------------------------------|-----------------------|--------------------------------------|--------------------------------------|------------------------|--|-------------|
| | | | | 50Hz Single Half Sine Wave | | | | | V _{R=V_{RM}} max | V _{R=V_{RM}} max | | | |
| 30 | 3.0 | Axial(φ6.5/φ1.4) | RJ 43 | 50 | -40 to +150 | | 0.45 | 3.0 | 3.0 | 100 | 150 | 8.0 | 1.2 |
| | 10 | TO-220F(Center-tap) | FMJ-23L | 100 | -40 to +150 | | 0.45 | 5.0 | 5.0 | 175 | 150(Ta) | 4.0 | 2.1 |
| | 30 | TO-220F(Center-tap) | FMJ-2303 | 150 | -40 to +150 | | 0.48 | 15 | 15 | 500 | 150 | 4.0 | 2.1 |

Package Type (Dimensions)

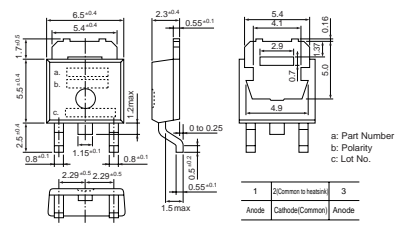
• No. 1 Surface-Mount (SJP)



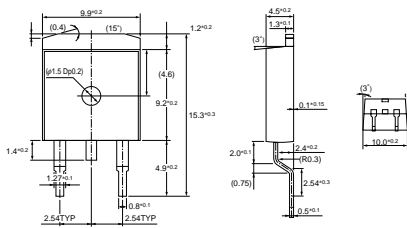
• No. 2 Surface-Mount (D pack)



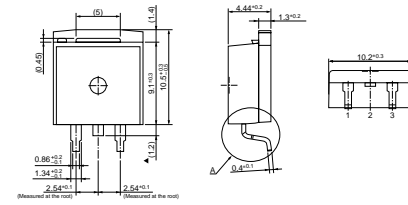
• No. 3 Surface-Mount (D pack) Center-tap



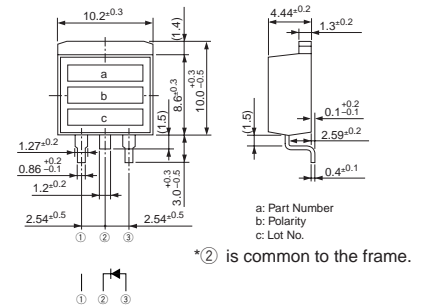
• No. 4 Surface-Mount (TO263)



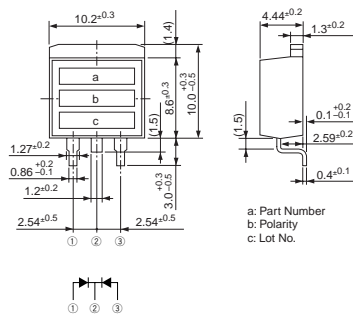
• No. 5 Surface-Mount (TO220S)
MPL-102S, MP2-202S, MPL-1036



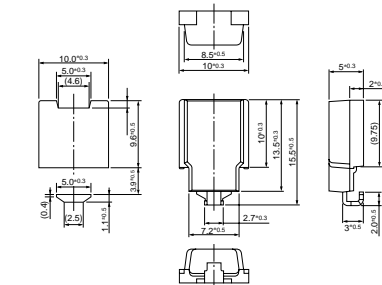
• No. 6 Surface-Mount (TO220S)



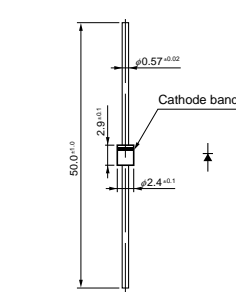
• No. 7 Surface-Mount (TO220S) Center-tap



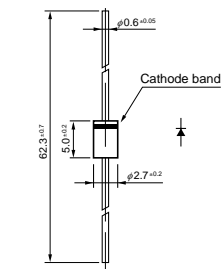
• No. 8 Surface-Mount (SZ-10)



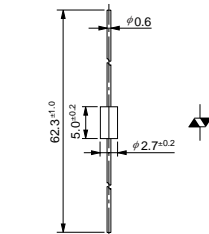
• No. 9 Axial (φ2.4/φ0.6)



• No. 10 Axial (φ2.7/φ0.6)



• No. 11 Axial (φ2.7/φ0.6)
Silicon Varistors (Symmetrical)



• No. 12 Axial (φ2.7/φ0.78)

