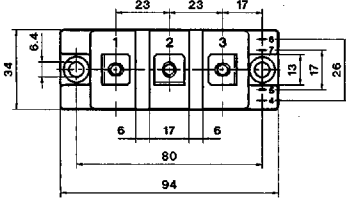
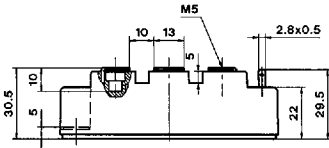


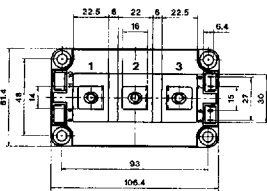
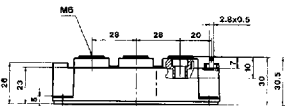
Cases D 61 ... 64
L = 2 x 23 mm

SEMİTRANS® 2



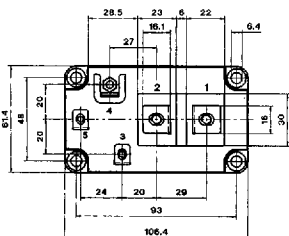
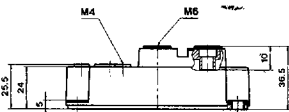
Cases D 56 ... 58
L = 2 x 28 mm
Low Inductance $L_{CE} < 20$ nH

SEMİTRANS® 3



Cases D 59 ... 60
Low Inductance $L_{CE} < 20$ nH

SEMİTRANS® 4 ⁶⁾



Section 6:

SEMİTRANS® IGBT Modules; New Range 1995/96

3rd Version: Low Inductance, lower V_{CEsat} , soft and fast CAL diodes¹⁾; Preliminary Data ⁴⁾

| Type | V_{CES} ²⁾ | I_c ³⁾ | V_{CEsat} ³⁾ | P_{tot} ³⁾ | $R_{th(j-c)}$ | $R_{th(c-h)}$ | Case | Circuit |
|--------------------------------|-------------------------|---------------------|---------------------------|-------------------------|---------------|---------------|---------------|---------|
| | V | A | V | W | °C/W | °C/W | | |
| * under development | | | | | | | | |
| SKM 50 GA 123 D | 1200 | 50 | 3,2 | 310 | 0,4 | 0,05 | D64 | |
| SKM 75 GA 163 D | 1600 | 75 | 3,8 | 500 | 0,25 | 0,05 | D64 | |
| SKM 100 GA 123 D | 1200 | 100 | 3,2 | 625 | 0,20 | 0,05 | D64 | |
| SKM 100 GA 163 D | 1600 | 100 | 3,8 | 625 | 0,20 | 0,05 | D64 | |
| SKM 200 GA 123 D | 1200 | 200 | 3,2 | 1250 | 0,10 | 0,038 | D59 | |
| SKM 300 GA 123 D | 1200 | 300 | 3,2 | 1550 | 0,08 | 0,038 | D59 | |
| SKM 300 GA 163 D | 1600 | 300 | 3,8 | 1750 | 0,07 | 0,038 | D59 | |
| SKM 300 GA 173 D ⁵⁾ | 1700 | 300 | 3,8 | 1750 | 0,07 | 0,038 | D59 | |
| SKM 400 GA 123 D ⁵⁾ | 1200 | 400 | 3,2 | 2500 | 0,05 | 0,038 | D59 | |
| SKM 400 GA 163 D ⁵⁾ | 1600 | 400 | 3,9 | 2500 | 0,05 | 0,038 | D59 | |
| SKM 400 GA 173 D ⁵⁾ | 1700 | 400 | 3,9 | 2500 | 0,05 | 0,038 | D59 | |
| * SKM 500 GA 123 DS | 1200 | 520 | 3,2 | 2700 | 0,045 | 0,038 | D60 | |
| SKM 75 GAL 123 D | 1200 | 75 | 3,2 | 400 | 0,30 | 0,05 | D62 | |
| SKM 100 GAL 123 D | 1200 | 100 | 3,2 | 625 | 0,20 | 0,05 | D62 | |
| SKM 100 GAL 163 D | 1600 | 100 | 3,8 | 625 | 0,20 | 0,05 | D62 | |
| SKM 150 GAL 123 D | 1200 | 150 | 3,2 | 800 | 0,16 | 0,038 | D57 | |
| SKM 200 GAL 123 D | 1200 | 200 | 3,2 | 1120 | 0,10 | 0,038 | D57 | |
| SKM 200 GAL 163 D | 1600 | 200 | 3,9 | 1120 | 0,10 | 0,038 | D57 | |
| SKM 75 GAR 123 D | 1200 | 75 | 3,2 | 400 | 0,30 | 0,05 | D63 | |
| SKM 100 GAR 123 D | 1200 | 100 | 3,2 | 625 | 0,20 | 0,05 | D63 | |
| SKM 100 GAR 163 D | 1600 | 100 | 3,8 | 625 | 0,20 | 0,05 | D63 | |
| SKM 150 GAR 123 D | 1200 | 150 | 3,2 | 800 | 0,16 | 0,038 | D58 | |
| SKM 200 GAR 123 D | 1200 | 200 | 3,2 | 1120 | 0,10 | 0,038 | D58 | |
| SKM 200 GAR 163 D | 1600 | 200 | 3,9 | 1120 | 0,10 | 0,038 | D58 | |
| SKM 50 GB 123 D | 1200 | 50 | 3,2 | 310 | 0,4 | 0,05 | D61 | |
| SKM 75 GB 123 D | 1200 | 75 | 3,2 | 400 | 0,30 | 0,05 | D61 | |
| SKM 75 GB 163 D | 1600 | 75 | 3,8 | 500 | 0,25 | 0,05 | D61 | |
| SKM 75 GB 173 D ³⁾ | 1700 | 75 | 3,8 | 500 | 0,25 | 0,05 | D61 | |
| SKM 100 GB 123 D | 1200 | 100 | 3,2 | 625 | 0,20 | 0,05 | D61 | |
| SKM 100 GB 163 D | 1600 | 100 | 3,9 | 625 | 0,20 | 0,05 | D61 | |
| SKM 100 GB 173 D ³⁾ | 1700 | 100 | 3,9 | 625 | 0,20 | 0,05 | D61 | |
| * SKM 145 GB 123 D | 1200 | 150 | 3,2 | 700 | 0,18 | 0,05 | D61 | |
| SKM 150 GB 123 D | 1200 | 150 | 3,2 | 800 | 0,16 | 0,038 | D56 | |
| SKM 150 GB 163 D | 1600 | 150 | 3,8 | 1000 | 0,13 | 0,038 | D56 | |
| SKM 150 GB 173 D ³⁾ | 1700 | 150 | 3,8 | 1000 | 0,13 | 0,038 | D56 | |
| SKM 200 GB 123 D ⁵⁾ | 1200 | 200 | 3,2 | 1250 | 0,10 | 0,038 | D56 | |
| SKM 200 GB 163 D | 1600 | 200 | 3,9 | 1250 | 0,10 | 0,038 | D56 | |
| SKM 200 GB 173 D ³⁾ | 1700 | 200 | 3,9 | 1250 | 0,10 | 0,038 | D56 | |
| * SKM 300 GB 123 D | 1200 | 300 | 3,2 | 1400 | 0,09 | 0,038 | D56 | |
| SKM 22 GD 123 D | 1200 | 22 | 3,2 | 145 | 0,86 | 0,05 | page 6 D28 | |
| SKM 40 GD 123 D | 1200 | 40 | 3,3 | 200 | 0,60 | 0,05 | D28 | |
| * SKM 75 GD 123 D | 1200 | 75 | 3,2 | 400 | 0,30 | 0,05 | D28 | |

1) CAL = Controlled Axial Lifetime Technology
 2) 1600 V and 1700 V IGBTs have $V_{ISOL} = 4$ kV_{rms}/1 min
 3) 1700 V types will replace 1600 V types in 1996
 4) All data apply to one single IGBT element
 5) Option enlarged diode, add suffix "1"
 6) Option collector sense, add suffix "S" = case 60