

New Jersey Semi-Conductor Products, Inc.

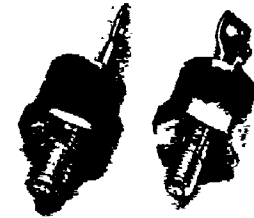
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| V _{RSM} | V _{RRM} V _{DRM} | (dv/dt) _{cr} | I _{TRMS} (maximum values for continuous operation) | |
|------------------|--------------------------------------|-----------------------|---|---------------------|
| | | | 63 A | 78 A |
| V | V | V/μs | I _{TAV} (sin. 180; T _{case} = ... °C) | |
| | | | 40 A (80 °C) | 50 A (78 °C) |
| 500 | 400 | 200 | SKT 40/04 C | SKT 50/06 C* |
| 700 | 600 | 200 | SKT 40/06 C | |
| 900 | 800 | 200 | SKT 40/08 C | |
| 1300 | 1200 | 200 | SKT 40/12 C* | SKT 50/12 C* |
| | | 1000 | SKT 40/12 E | |
| 1500 | 1400 | 1000 | SKT 40/14 E | SKT 50/16 E* |
| 1700 | 1600 | 1000 | SKT 40/16 E* | |

Thyristors

SKT 40
SKT 50



| Symbol | Conditions | SKT 40 | SKT 50 |
|---|---|---|--|
| I _{TAV} | sin. 180; T _{case} = 85 °C | 38 A | 45 A |
| I _{TSM} | T _{vj} = 25 °C T _{vj} = 130 °C | 700 A 600 A | 1050 A 900 A |
| i ² t | T _{vj} = 25 °C T _{vj} = 130 °C | 2500 A ² s 1800 A ² s | 5000 A ² s 4000 A ² s |
| t _{gd} t _{gr} (di/dt) _{cr} | T _{vj} = 25 °C; I _G = 1 A; di _G /dt = 1 A/μs V _D = 0,67 · V _{DRM} f = 50 ... 60 Hz | typ. 1 μs typ. 1,5 μs 50 A/μs | |
| I _H | T _{vj} = 25 °C; typ./max. | 100 mA/100 mA | |
| I _L | T _{vj} = 25 °C; R _G = 33 Ω; typ./max. | 250 mA/400 mA | |
| t _q | T _{vj} = 130 °C; typ. | 100 μs | |
| V _T | T _{vj} = 25 °C; I _T = 120 A; max. | 1,95 V | 1,8 V |
| V _{T(TO)} | T _{vj} = 130 °C | 1,0 V | 1,1 V |
| r _T | T _{vj} = 130 °C | 9 mΩ | 5 mΩ |
| I _{DD} , I _{RD} | T _{vj} = 130 °C; V _{DD} = V _{DRM} ; V _{RD} = V _{RRM} | 8 mA | 8 mA |
| V _{GT} | T _{vj} = 25 °C | 3 V | |
| I _{GT} | T _{vj} = 25 °C | 150 mA | |
| V _{GD} | T _{vj} = 130 °C | 0,25 V | |
| I _{GD} | T _{vj} = 130 °C | 5 mA | |
| R _{thjc} | cont. sin. 180 rec. 120 | 0,60 °C/W 0,66 °C/W 0,70 °C/W | 0,57 °C/W 0,60 °C/W 0,65 °C/W |
| R _{thch} T _{vj} T _{stg} | | 0,20 °C/W -40 ... +130 °C -55 ... +150 °C | |
| M a w | SI units US units | 4 Nm (UNF: 2,5 Nm) 35 lb. in (UNF: 22 lb. in.) 5 · 9,81 m/s ² 2,2 g | |
| Case | | B 3 | |

Features

- Hermetic metal cases with glass insulators
- Threaded studs UNF 1/4-28
- International standard cases

Typical Applications

- DC motor control (e. g. for machine tools)
- Controlled rectifiers (e. g. for battery charging)
- AC controllers (e. g. for temperature control)