

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

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	700 A	1050 A
	T _{vj} = 130 °C	600 A	900 A
i ² t	T _{vj} = 25 °C	2500 A ² s	5000 A ² s
	T _{vj} = 130 °C	1800 A ² s	4000 A ² s
t _{gd}	T _{vj} = 25 °C; I _G = 1 A; di _G /dt = 1 A/μs	typ. 1 μs	
t _{gr}	V _D = 0,67 · V _{DRM}	typ. 1,5 μs	
(di/dt) _{cr}	f = 50 ... 60 Hz	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.	0,60 °C/W	0,57 °C/W
	sin. 180	0,66 °C/W	0,60 °C/W
	rec. 120	0,70 °C/W	0,65 °C/W
R _{thch}		0,20 °C/W	
T _{vj}		-40 ... +130 °C	
T _{stg}		-55 ... +150 °C	
M	SI units	4 Nm (UNF: 2,5 Nm)	
	US units	35 lb. in (UNF: 22 lb. in.)	
a		5 · 9,81 m/s ²	
w		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)