




[V<sub>DRM,RRM</sub> max. 1800V](#) [V<sub>DRM,RRM</sub> max. 3800V](#) [V<sub>DRM,RRM</sub> max. 5200V](#) [V<sub>DRM,RRM</sub> max. 8000V](#) [Light Triggered SCRs](#)


the figures in the part-no. represent the current rating [A]

V <sub>DRM,RRM</sub> max. 600 V		V <sub>DRM,RRM</sub> max. 1800 V		typical Packages
T 210 N		T 86 N		Stud case 
		T 130 N	T 221 N	
		T 160 N	T 345 N	Flat case 
			T 370 N	
T 348 N	T 1078 N	T 178 N	T 648 N	Epoxy disc 
T 398 N	T 1258/1259 N	T 218 N	T 649 N	
T 568 N	T 2509 N	T 298 N		
T 828 N		T 358 N	T 718/719 N	
		T 378 N	T 879 N	
		T 388 N	T 1189 N	
		T 508 N	T 1209 N	
		T 509 N	T 1509 N	
		T 548 N	T 1989 N	
		T 588/589 N	T 3159 N	
		T 618/619 N		Ceramic disc 
		T 1200 N	T 1500 N	
			T 2551 N	
			T 2651 N	

click on part-no. to select datasheet - click on other topologies

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V <sub>DRM,RRM</sub> max. 2200 V		V <sub>DRM,RRM</sub> max. 2800 V		V <sub>DRM,RRM</sub> max. 3800 V		typical Packages
T 639 N	T 1869 N	T 308 N	T 939 N	T 380 N	T 1929 N	
T 699/708 N	T 2479 N	T 458/459 N	T 1059 N	T 869 N	T 2006 N	
T 1039 N	T 2706 N	T 658/659 N	T 1219 N	T 909 N	T 2009 N	
T 1329 N	T 2709 N	T 699/708 N	T 1589 N			
T 1866 N		T 709 N	T 2156/2159 N	T 2476 N		
		T 829 N	T 2479 N			 Ceramic disc
T 2710 N		T 2101 N	T 2510 N	T 860 N	T 2001 N	
		T 2160 N	T 4301 N	T 901 N	T 3401N	
		T 2480 N	T 4771 N	T 1601 N		

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[Type Designation](#) [Technical Explanation](#)

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V<sub>DRM,RRM</sub> max. 4200 V

V<sub>DRM,RRM</sub> max. 5200 V

typical Packages

T 739 N

Epoxy disc



T 731 N

T 1401 N

T 1321 N

T 2351 N

T 1451 N

T 2401 N

T 1551 N

T 2601 N

T 2161 N

T 2851 N

T 2301 N

Ceramic disc



click on part-no. to select datasheet - click on other topologies

Type Designation

Technical Explanation

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the figures in the part-no. represent the current rating [A]


V <sub>DRM,RRM</sub> max. 7000 V		V <sub>DRM,RRM</sub> max. 8000 V		typical Packages
T 201 N	T 821 N	T 1201 N	T 1901 N	
T 501 N	T 1081 N	T 1501 N	T 2561 N	
T 551 N	T 1851 N			

click on part-no. to select datasheet - click on other topologies

[Type Designation](#) | [Technical Explanation](#)

[V<sub>DRM,RRM</sub> max. 1800V](#) | 
 [V<sub>DRM,RRM</sub> max. 3800V](#) | 
 [V<sub>DRM,RRM</sub> max. 5200V](#) | 
 [V<sub>DRM,RRM</sub> max. 8000V](#) | 
 [Light Triggered SCRs](#)

the figures in the part-no. represent the current rating [A]

<b>V<sub>DRM,RRM</sub> max. 8000 V</b>	<b>typical Packages</b>
T 553 N	
T 1503 N	
T 2563 N	
T 4003 N	
Ceramic disc	
click on part-no. to select datasheet - click on other topologies	

Type Designation

Technical Explanation

# Type designations

# Typenbezeichnungen

## Thyristors

T	930	S	18	T	M	C	
T							symmetrically blocking thyristor
A							asymmetrically blocking thyristor
	930						limiting average forward current (A) at $t_c = 85^\circ \text{C}$
	0						Ceramic disc W
	1						Ceramic disc P
	4						Epoxy disc 19 mm high
	6						Epoxy disc 35 mm high
	7						Epoxy disc 8 mm high
	8						Epoxy disc 14 mm high
	9						Epoxy disc 26 mm high
2.Letter							
	S						fast thyristor, gate-cathode interdigitated
	F						fast thyristor, central gate
	N						phase control thyristor
	18						limiting repetitive peak forward and reverse off-state voltage in 100 V, 18 = 1800 V (A: repetitive peak forward off-state voltage)
3.Letter							
	B						mechanical construction anode: metric thread
	C						anode: cable
	E						metric thread solder pin
	F						flat base cable
	T						TO 220 case disc
4.Letter							
	A						maximum turn-off time 8 $\mu\text{s}$
	B						10 $\mu\text{s}$
	C						12 $\mu\text{s}$
	D						15 $\mu\text{s}$
	S						18 $\mu\text{s}$
	E						20 $\mu\text{s}$
	F						25 $\mu\text{s}$
	G						30 $\mu\text{s}$
	K						40 $\mu\text{s}$
	M						50 $\mu\text{s}$
	P						55 $\mu\text{s}$
	N						60 $\mu\text{s}$
	T						80 $\mu\text{s}$
	U						120 $\mu\text{s}$
	O						no guaranteed max. value
	1						see data sheet
	2						see data sheet
5.Letter							
							critical rate of rise forward voltage, thyristors for line commutated converters:
	B						50 V/ $\mu\text{s}$
	C						500 V/ $\mu\text{s}$
	F						1000 V/ $\mu\text{s}$
	G						1500 V/ $\mu\text{s}$
	H						2000 V/ $\mu\text{s}$
							thyristors for self-commutated converters: critical rate of rise of forward voltage
							according to DIN IEC 747-6:
							immediately after turn-off:
	B						50 V/ $\mu\text{s}$
	C						500 V/ $\mu\text{s}$
	F						1000 V/ $\mu\text{s}$
	L						50 V/ $\mu\text{s}$
	M						1000 V/ $\mu\text{s}$
	N						50 V/ $\mu\text{s}$

## Rectifier

D	1809	N	32				
D							diode
	1809						limiting average current (A)
							as a rule at $t_c = 100^\circ \text{C}$
		N					rectifier diode:
							anode on case
							or press-pack
		K					cathode on case
							fast rectifier diode:
		S					anode on case
							or press-pack
		U					cathode on case
							limiting repetitive peak reverse voltage in 100 V
							mechanical construction:
				A			metric thread wire
				B			metric thread cable
				C			stud solder pin
				E			flat-base cable
				T			press-pack
		A					Avalanche Diode anode / case
		B					Avalanche Diode cathode / case

## Half-controlled thyristor modules

TD	121	N	18	K	O	F	-A
TD,DT							
AD							
	121						with 1 symmetric thyristor and 1 diode
							with 1 asymmetric thyristor and 1 diode
							(for circuit see outline)
							limiting average on-state current (A), $t_c = 85^\circ \text{C}$
		N					phase control thyristor and rectifier diode
		F					fast thyristor and fast diode
		S					fast thyristor with interdigitated gate and fast diode
							repetitive peak-off-state voltage in 100 V
							mech. constr.: pressure contact
							turn-off time (see thyristors)
							critical rate of rise of off-state voltage
							-A special design with common anode
							-K special design with common cathode

## IGBT modules Type designation

IGBT & Diode: IHM/IHV & all new eupec modules							
FF	800	R	17	K	F	6	D B2
FF							Dual Switch
FZ							Single Switch
FS							3-phase full Bridge
FP							Power integrated Modul
F4-							One phase bridge
FD							Chopper config.
DD							Dual Diode (for circuit see outline)
	800						Max. DC-collector current (A)
		R					Reverse conducting
		S					Fast Short Tail IGBT Chip
							Collector-emitter-voltage in 100 V
							Mechanical construction: Module
							Fast switching IGBT Chip
							Low Loss IGBT Chip
							Short Tail IGBT Chip
							Low Sat & fast IGBT <sup>3</sup> Chip
							1..n Internal reference number
							C With EmCon diode
							D Higher rated diode
							B1..n Construction variation
							S1..n Electrical selection

## IGBT & Diodes: BSM modules

BSM	100	GB	120	D	N2	K	
B							Silicon
S							Type: S=Switch, Y = Diode
M							Module
	100						current rating $I_C = 100 \text{ A}$
		G					technology: G = IGBT-technology
		B					Configuration:
							A = single switch / diode
							B = Halfbridge
							D = 3-phase full bridge
							T = Tripack (3 single switches)
							P = Power Integrated Module
							AL=Chopper, diode conn. to collector
							AR=Chopper, diode conn. to emitter
							max. coll.-emitter-voltage in 10V
							with fast internal diode
							low inductance module design
							L Low Loss IGBT chip
							2 2nd generation silicon
							K design variation
							G design variation
							S collector sense
							E xxxx special type with codo-no.