

PRODUCT BRIEF

COMPRESSION BONDED STUD



FEATURES

Compressed Stud

- Pressure contact construction
- Gold metallization for semiconductor element
- Simple mounting
- High resistance to cyclic load
- Mean on-state current and forward currents up to 600A
- Blocking voltage up to 2800V
- Metric & inch thread

Flat Base Diode

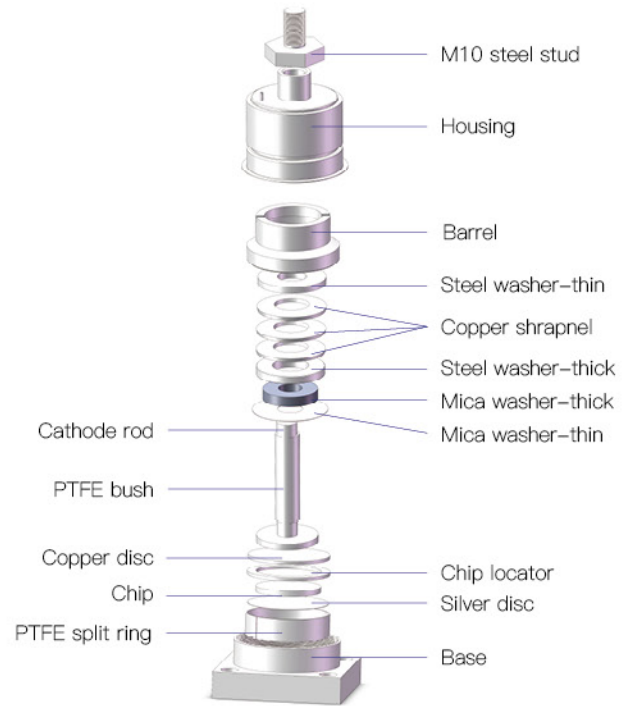
- Pressure contact construction
- Current ratings of 300A average to 860A average
- Voltage ratings of 1.6kV to 4.2kV
- Low losses for high efficiency
- Hermetically sealed for long operational life
- Easily mounted down with M8 bolts on 46mm centres
- Available anode to base and cathode to base polarity
- Selection of devices in groups for parallel operation

APPLICATIONS

- Rotating Excitation
- Brushless Alternator
- Turbine Generator
- Nuclear Energy generator
- Explosion-proof Synchronous Motor
- Railway Transport



STRUCTURE CHART



PHASE CONTROL THYRISTORS - STUD / FLAT BASE - COMPRESSION BONDED

Type	V_{DRM}, V_{RRM} [V] $V_{DSM}=V_{DRM}$ $V_{RSM}=V_{RRM}+100V$	I_{DRM}, I_{RRM} [mA] T_{jmax}	I_{TAVM} / T_C [A / °C] @180° Sine	I_{TSM} [A] @ 10ms T_{jmax}	$\int i^2 t$ [A ² S] @ 10ms T_{jmax}	V_T / I_T [V / A] T_{jmax}	$V_{F(TO)}$ [V] @ T_{jmax}	r_T [mΩ] @ T_{jmax}	I_{gt} [mA]	R_{thJC} [°C/W] @180° Sine	T_{jmax} [°C]
MS T175S	200 --- 1600	50	175 / 85	4600	105800	1.75 / 550	1.03	1.30	200	0.14	125
MS T250S	200 --- 1600	50	250 / 85	6000	180000	1.70 / 785	0.92	0.87	200	0.11	125
MS T285S	200 --- 800	50	285 / 85	7850	308000	1.35 / 900	0.88	0.47	200	0.115	125
MS T350S	200 --- 1600	80	350 / 85	8000	320000	1.65 / 1100	0.85	0.50	200	0.088	125
MS T500S	200 --- 1600	80	500 / 75	12000	720000	1.60 / 1600	0.90	0.35	200	0.076	125

RECTIFIER DIODES - STUD / FLAT BASE - COMPRESSION BONDED

Type	V_{RRM} [V] $V_{RSM}=V_{RRM}+100V$	I_{FAVM} / T_C [A / °C] @180° Sine	I_{FSM} [A] @ 10ms T_{jmax}	$\int i^2 t$ [A ² S] @ 10ms T_{jmax}	V_F / I_F [V / A] T_{jmax}	$V_{F(TO)}$ [V] @ T_{jmax}	r_{FT} [mΩ] @ T_{jmax}	R_{thJC} [°C/W] @180° Sine	T_{jmax} [°C]
MS D304N/R	2600	300 / 110	6500	211000	1.40 / 800	0.76	0.74	0.100	150
MS D335N/R	2600	330/105	6500	211000	1.40/800	0.76	0.74	0.100	150
MS D404N/R	200 --- 1800	400 / 120	7500	281000	1.68 / 1260	0.80	0.68	0.086	170
MS D405N/R	200 --- 2800	400/ 105	7500	281000	1.75 / 1260	0.80	0.67	0.094	160
MS D451N/R	200 --- 1800	450 / 120	10500	551000	1.45 / 1350	0.75	0.46	0.088	170
MS D510N/R	3600	510 / 105	11800	696000	1.48 / 1500	0.95	0.34	0.065	160
MS D570N/R	3600	570 / 100	12000	720000	1.62 / 1800	0.90	0.39	0.072	160
MS D860N/R	200 --- 1800	860 / 100	16000	1280000	1.48 / 2500	0.74	0.21	0.078	180

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