

GMTD62050

SCR - DIODE MODULE

Insulated module
High current, high voltage applications

VOLTAGE UP TO 1800 V
AVERAGE OUTPUT CURRENT 500 A

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
VRRM	Repetitive peak reverse voltage		1800 V
VRSM	Non-repetitive peak reverse voltage		1900 V
VDRM	Repetitive peak off-state voltage		1800 V
IRRM	Repetitive peak reverse current, max.	VR, single phase, half wave, Tj = Tjmax	100 mA
VINS	RMS insulation voltage	50Hz, 1s, shorted terminals to base	3000 V

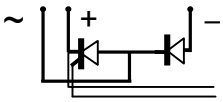
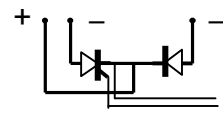
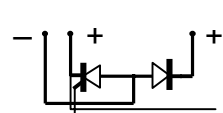
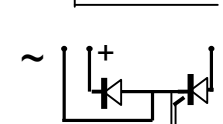
ON-STATE CHARACTERISTICS

IT(AV)	Average on-state current	Tc = 85 °C	500 A
ITSM	Surge current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	15 kA
I²t	I² t for fusing coordination	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	1125 kA²s
VT(TO)	Threshold voltage	Tj = Tjmax	0.9 V
Γr	Forward slope resistance	Tj = Tjmax	0.27 mΩ
VTM	Forward voltage, max	Forward current IF = 1570 A, Tj = 25 °C	1.35 V

THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-c)	Thermal resistance (junction to case)		0.065 °C/W
Rth(c-h)	Thermal resistance (case to heatsink)		0.020 °C/W
Tjmax	Operating junction temperature		-40 / 125 °C
F	Mounting torque +/- 10%	Module to heatsink	7 N·m
	Mass		1500 g

Ordering information

	GMTD62050-xx-H xx=VRRM/100
	GMTD62050-xx-C xx=VRRM/100 common cathode
	GMTD62050-xx-A xx=VRRM/100 common anode
	GMTD62050-xx-L xx=VRRM/100

