POWER BLOCK
GDDD710

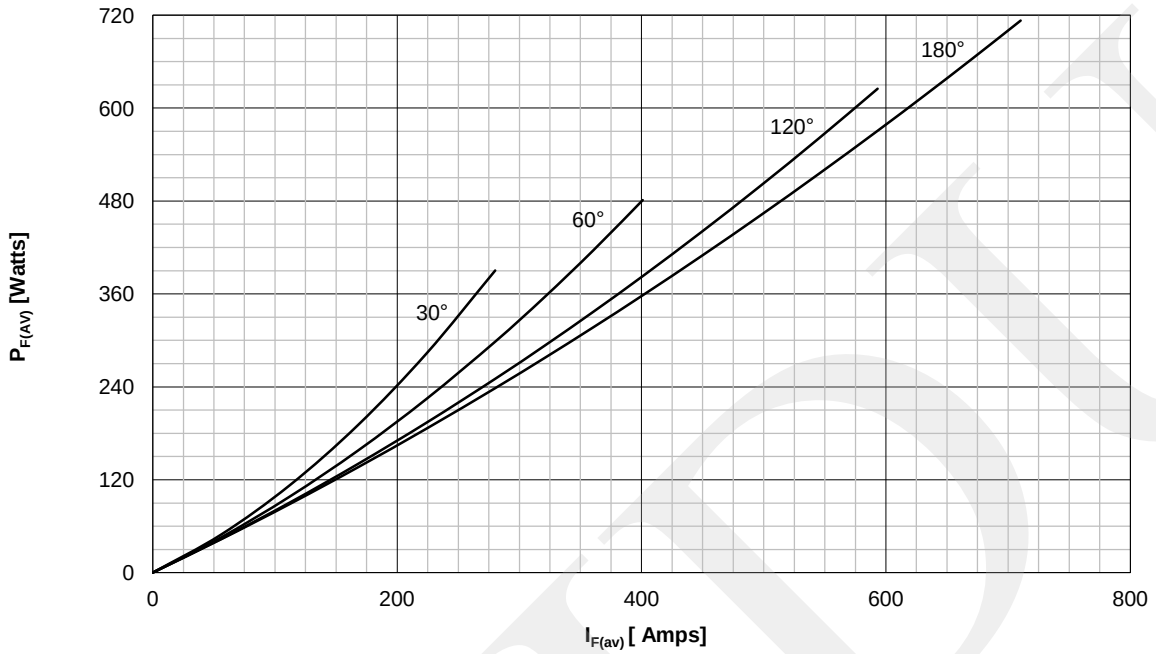
Features
- Full blocking capability over wide temperature range
- Electrically insulated base plate
- Pressure contacts technology for high reliability

Key Parameters
V_{RRM} = 1800V
$I_{F(AV)}$ = 710A
I_{FSM} = 26kA
$V_{F(TO)}$ = 0.75V
r_F = 0.145mΩ

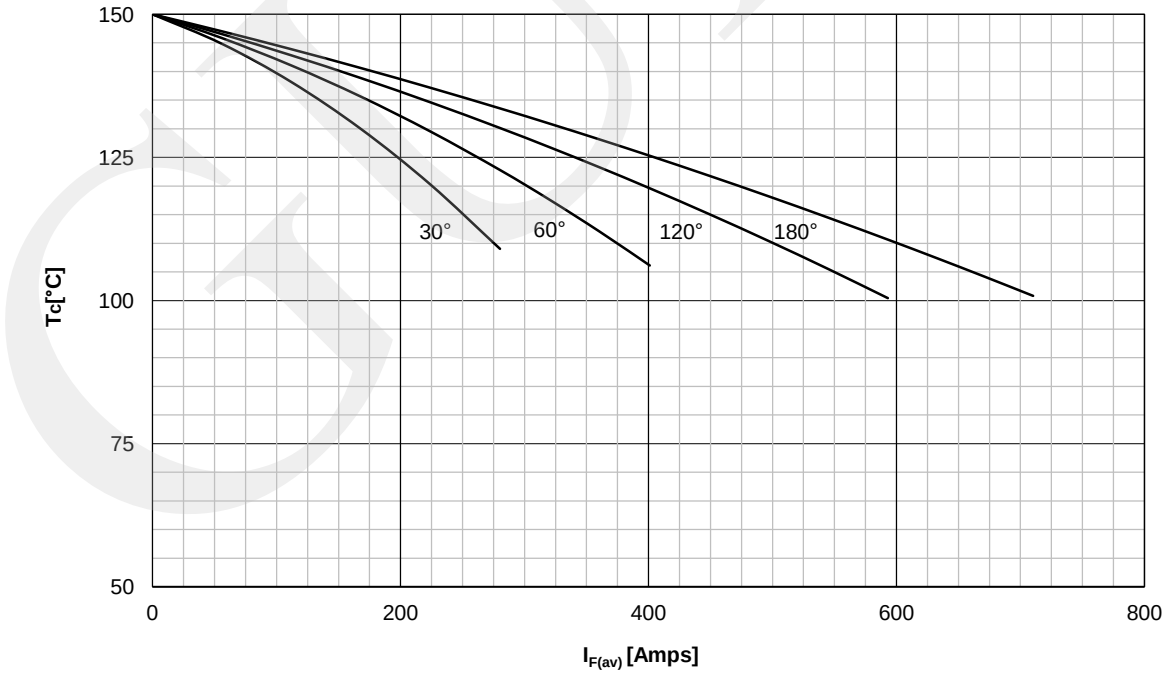
Applications
- Power Supplies
- Field supply for DC motors
- Uncontrolled Rectifiers

Symbol	Characteristic	Conditions	Tj [°C]	Value	Unit
BLOCKING					
V_{RRM}	Repetitive peak reverse voltage		150	200 - 1800	V
I_{RRM}	Repetitive peak reverse current	V= V_{RRM}	150	40	mA
CONDUCTING					
$I_{F(AV)}$	Mean forward current	180° sin ,50 Hz, T_{CASE}=100°C		710	A
I_{FRMS}	RMS forward current			1115	A
I_{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	26000	A
			150	22000	A
I^2t	I^2t	Sine wave, 10 ms Without reverse voltage	25	3380×10^3	A^2s
			150	2420×10^3	A^2s
V_F	Forward voltage	Forward current = 2200 A	25	1.30	V
$V_{F(TO)}$	Threshold voltage		150	0.75	V
r_F	Forward slope resistance		150	0.145	mΩ
MOUNTING					
$R_{th(j-c)}$	Thermal impedance, sin 180°	Junction to case, per arm per module		0.069 0.0345	°C/W
$R_{th(c-h)}$	Thermal impedance	Case to heatsink, per arm per module		0.02 0.01	°C/W
T_j	Max. junction temperature			150	°C
T_{stg}	Storage temperature			-40 150	°C
V_{ISOL}	Insulation test voltage,RMS	F=50Hz, 1min		2.5	KV
M1	Mounting torque			6 ± 15%	Nm
M2	Terminal connection torque			12 ± 10%	Nm
	Weight (Approx.)			1480	g

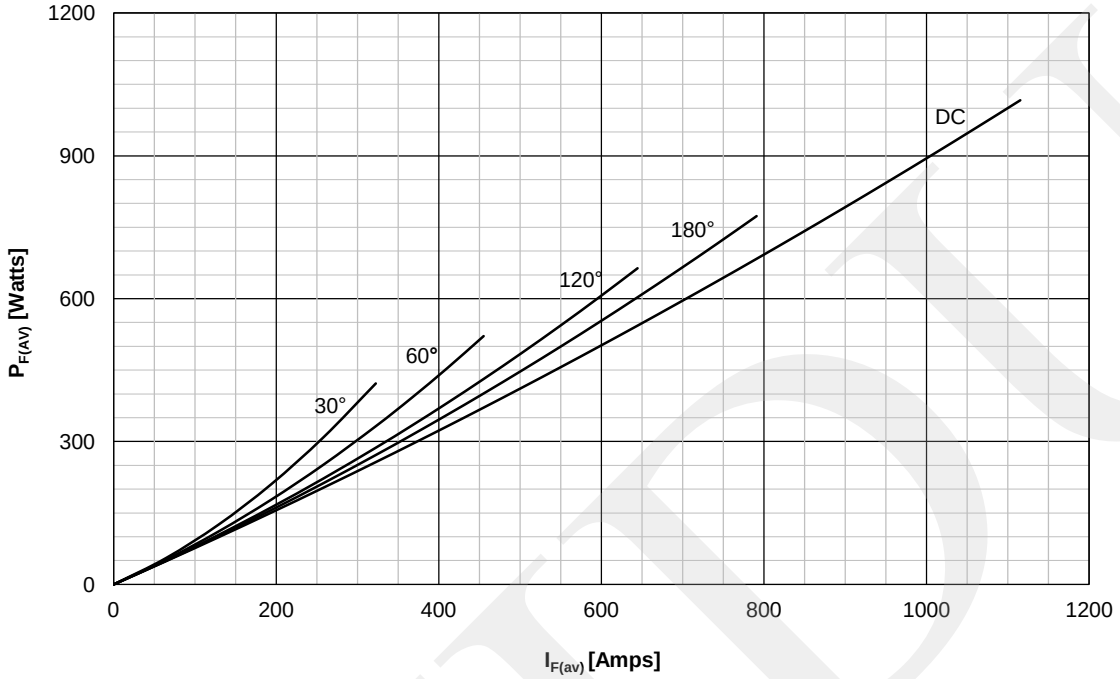
DISSIPATION CHARACTERISTICS PER ARM
SINE WAVE



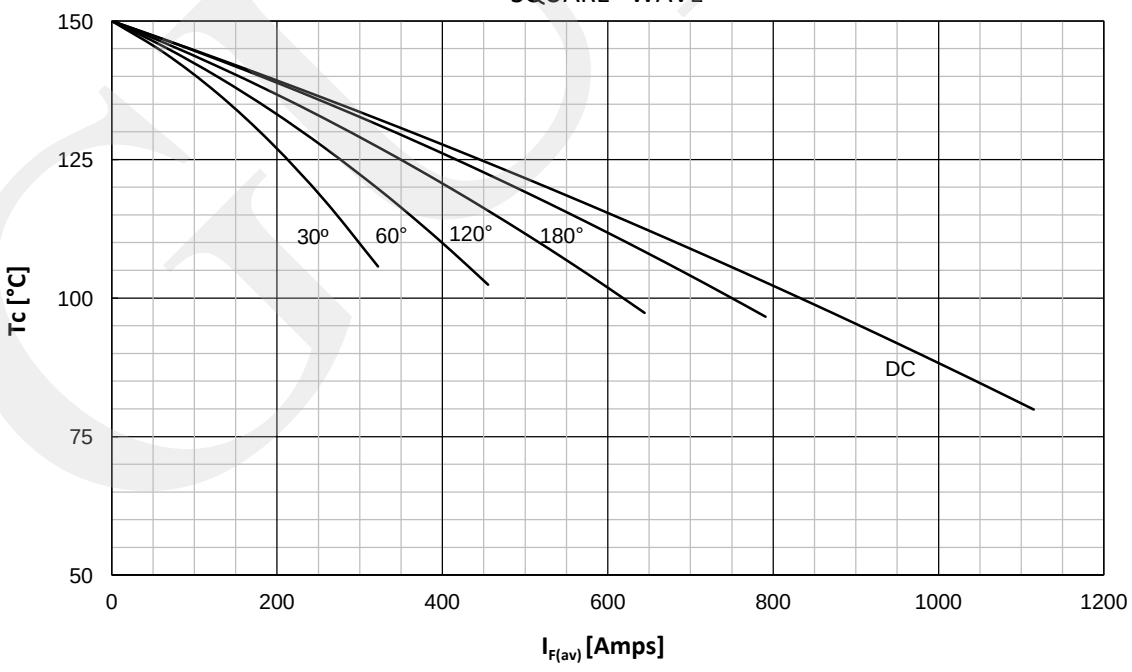
FORWARD CURRENT DERATING CURVE PER ARM
SINE WAVE



DISSIPATION CHARACTERISTICS PER ARM
SQUARE WAVE

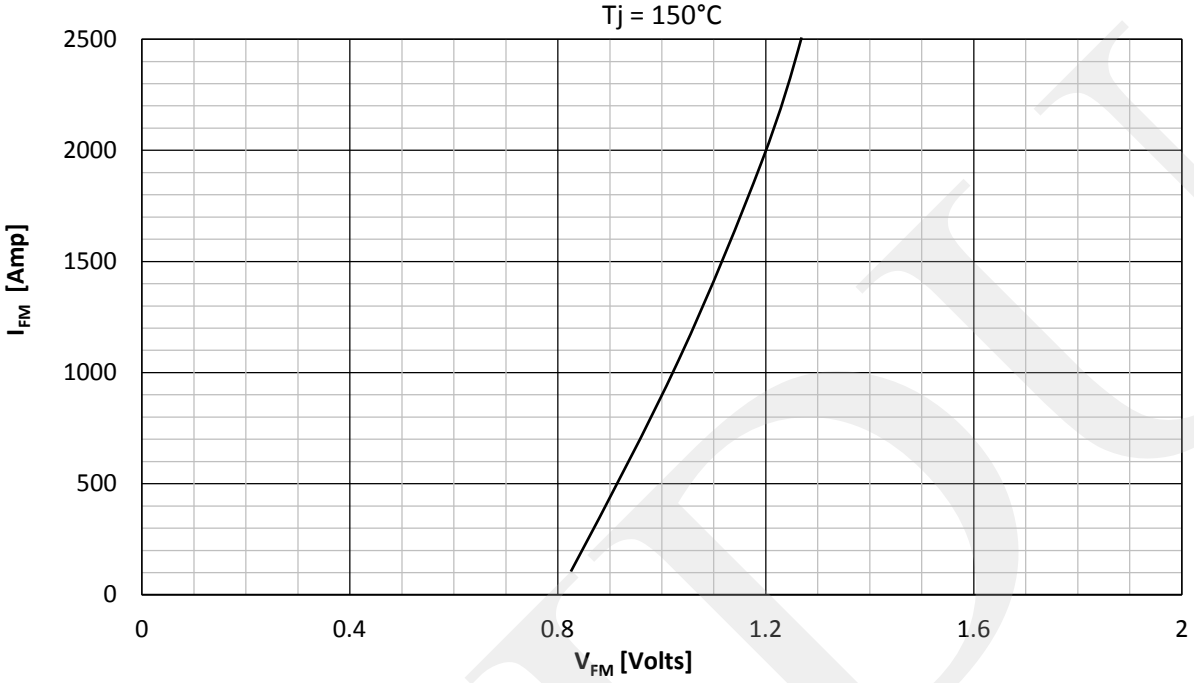


FORWARD CURRENT DERATING CURVE PER ARM
SQUARE WAVE

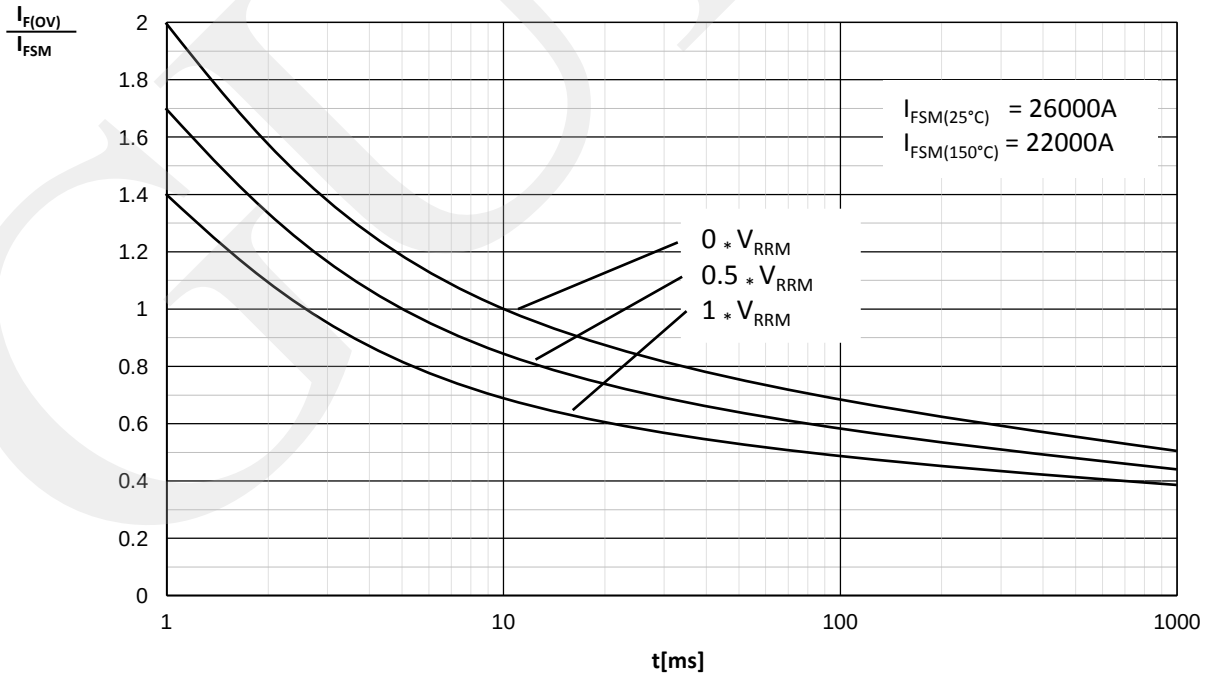


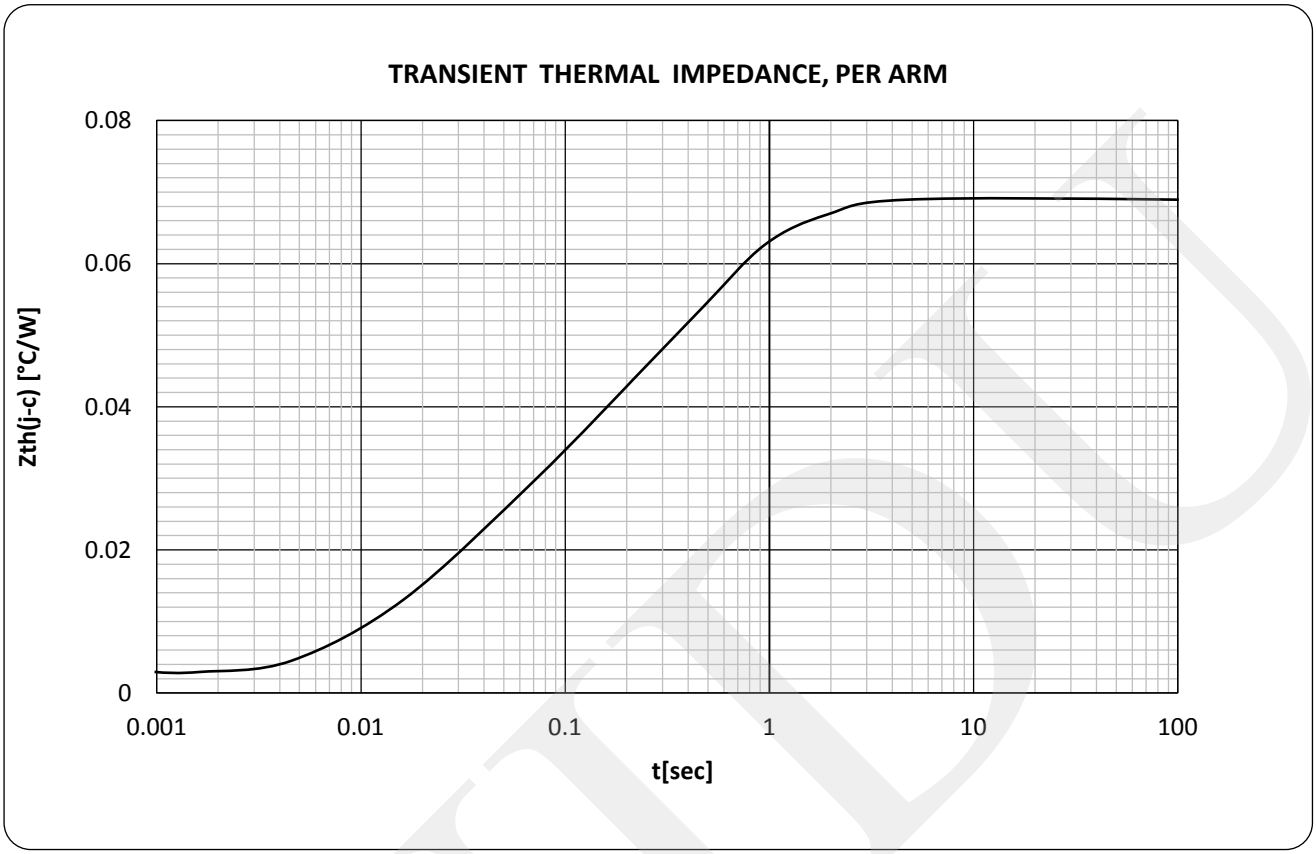
FORWARD CHARACTERISTICS

Tj = 150°C



SURGE CHARACTERISTICS



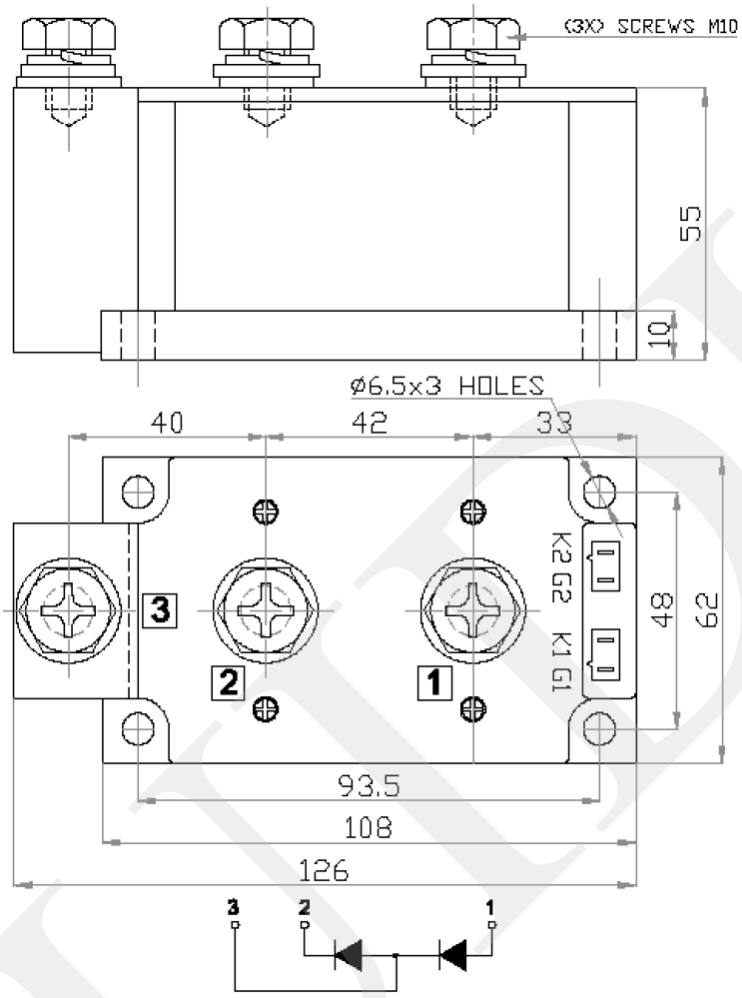


ORDERING INFORMATION

GD	DD	710	- X X
Fixed code	DD- Diode- Diode Module	Current Code	Voltage Code Code X 100 = V_{RRM}

Order Code GDDD710–18 : 1800V V_{RRM}, Diode-Diode Module

Outline



GDDD710-XX

SHANGHAI GUIDU TECHNOLOGY CO., LTD.
No. 3398,Huqingping Rd., Qingpu,
Dist., Shanghai 201703, China

www.guidutech.com

Tel.: +86 573 84828286
Fax.: +86 573 84828278

E-mail : sales@guidutech.com