



MTS111.16

POWER RECTIFIER BRIDGE

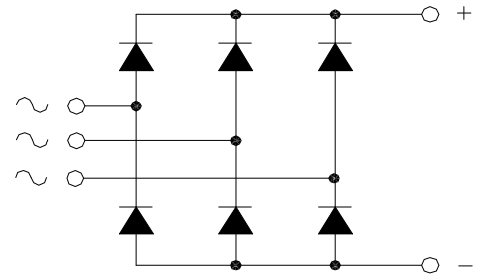
Output Current **110 A**
V_{RRM}/V_{DRM} **1600 V**

Features

- Full blocking capability over wide temperature range
- Heat transfer through isolated metal base plate
- Hard soldered joints for high reliability

Applications

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

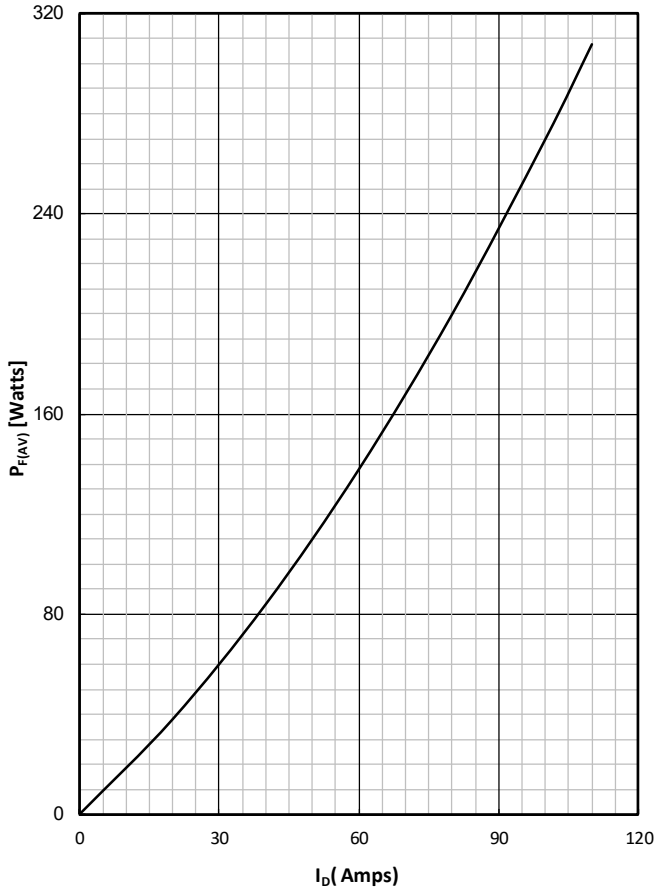


Key Parameters

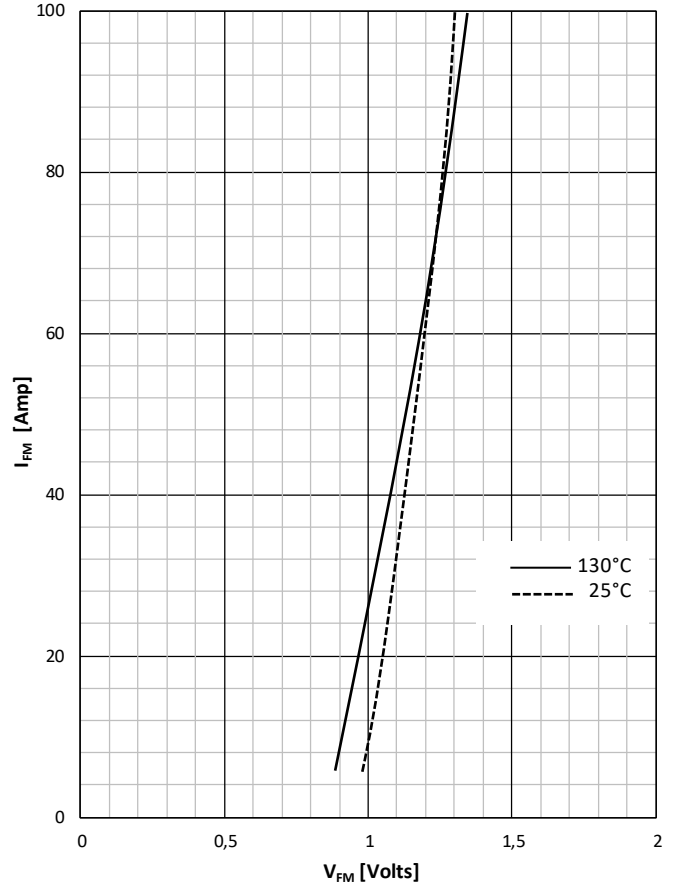
V_{RRM} = 1600V
I_{D(AV)} = 110A
I_{FSM} = 1150A
V_{F(TO)} = 0.85V
r_F = 5.0mΩ

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		130	800 - 1600	V
V _{RSM}	Non-repetitive peak reverse voltage		130	900 - 1700	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	130	5	mA
CONDUCTING					
I _{D(AV)}	DC output current	T _c =85°C		110	A
I _{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	1150	A
			130	1000	A
I ² t	I ² t	Sine wave, 10 ms Without reverse voltage	25	6612	A ² s
			130	5000	A ² s
V _F	Forward voltage	On-state current = 100A	25	1.30	V
V _{F(TO)}	Threshold voltage		130	0.85	V
r _F	Forward slope resistance		130	5.0	mΩ
MOUNTING					
R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case, per arm per bridge		0.85 0.14	°C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink, per bridge		0.05	°C/W
T _j	Max. junction temperature			130	°C
T _{stg}	Storage temperature			-40 ... 125	°C
V _{ISOL}	Insulation test voltage, RMS	F=50Hz, 1min		2.5	KV
M1	Mounting torque			5 ± 15%	Nm
M2	Terminal connection torque			4 ± 15%	Nm
W	Weight (Approx.)			165	gm

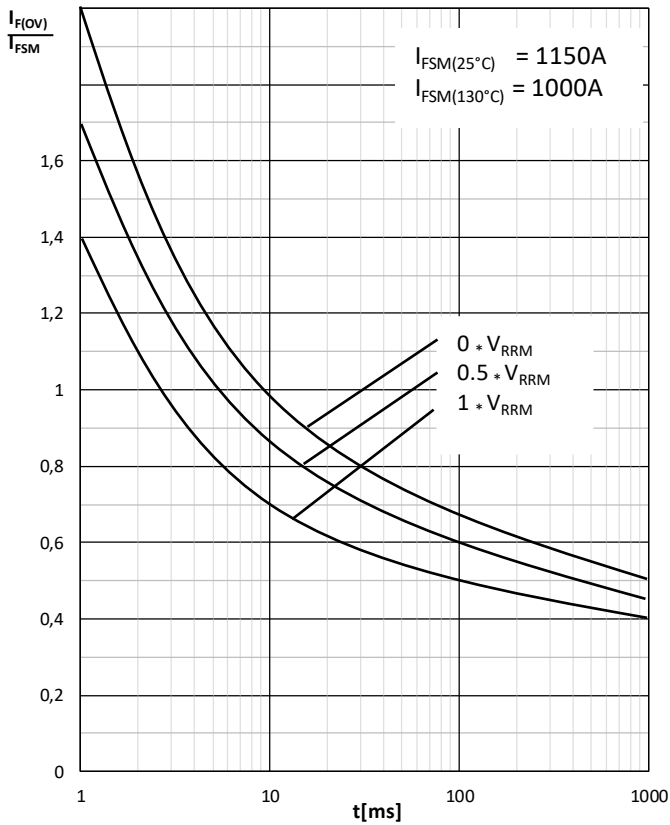
POWER DISSIPATION Vs OUTPUT CURRENT



ON - STATE CHARACTERISTIC OF A DIODE ARM



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE, PER ARM

