



Module Type

TYPE	VRRM	VRSM
MD130S08M3	800V	900V
MD130S12M3	1200V	1300V
MD130S16M3	1600V	1700V
MD130S18M3	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_D	Three phase, full wave $T_c=100$	130	A
I_{FSM}	$t=10\text{ms}$ $T_{vj}=45$	1200	A
i^2t	$t=10\text{ms}$ $T_{vj}=45$	7200	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T_{vj}		-40 to +150	
T_{stg}		-40 to +125	
M_t	To terminals(M6)	5±15%	Nm
M_s	To heatsink(M6)	5±15%	Nm
Weight	Module	230	g



Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
r_f	$T_J=150$	-	2.75	-	m Ω
V_{f0}	$T_J=150$	-	0.77	-	V
V_{FM}	$T=25$ $I_F=300A$		1.58	1.80	V
I_{RD}	$T_{vj}=25$ $V_{RD}=V_{RRM}$			0.3	mA
	$T_{vj}=150$ $V_{RD}=V_{RRM}$			5	mA

Performance Curves

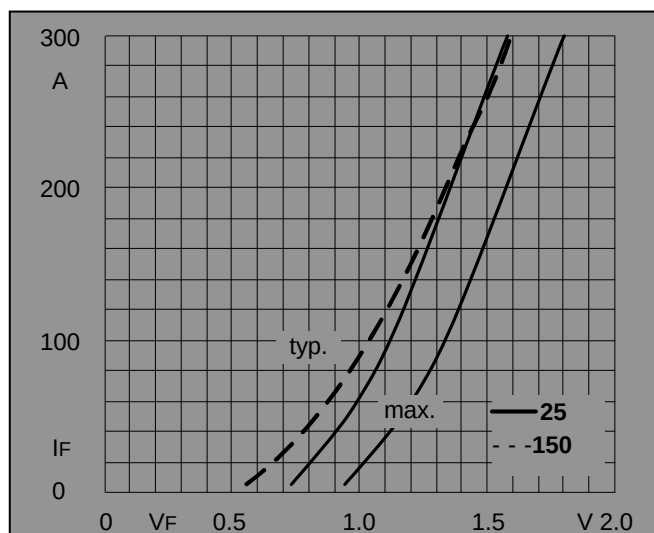


Fig1. Forward Characteristics

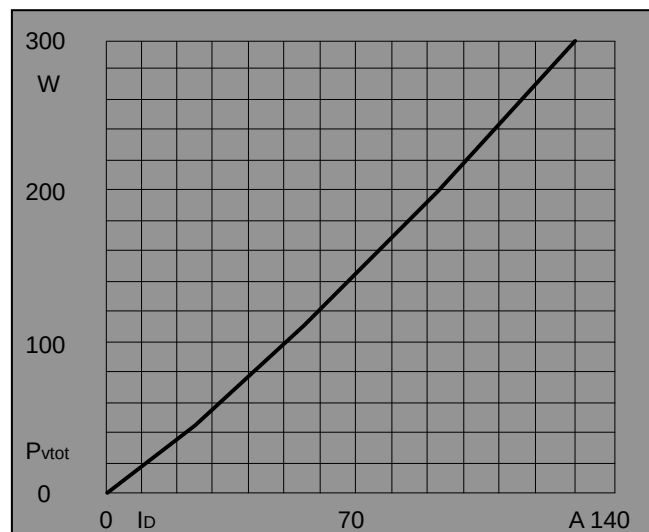


Fig2. Power dissipation

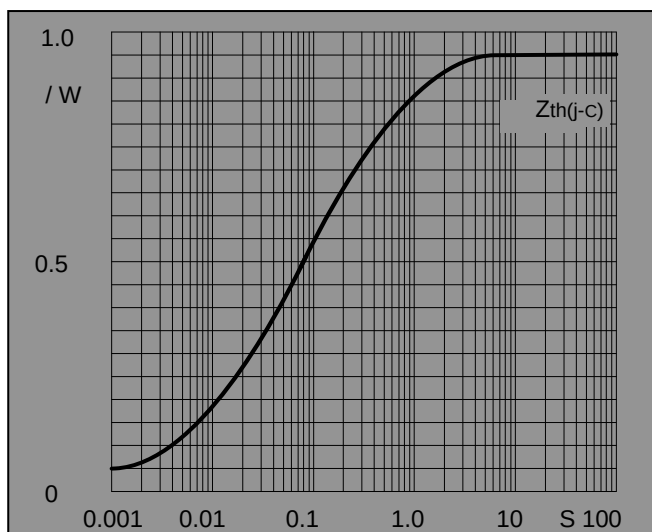


Fig3. Transient thermal impedance

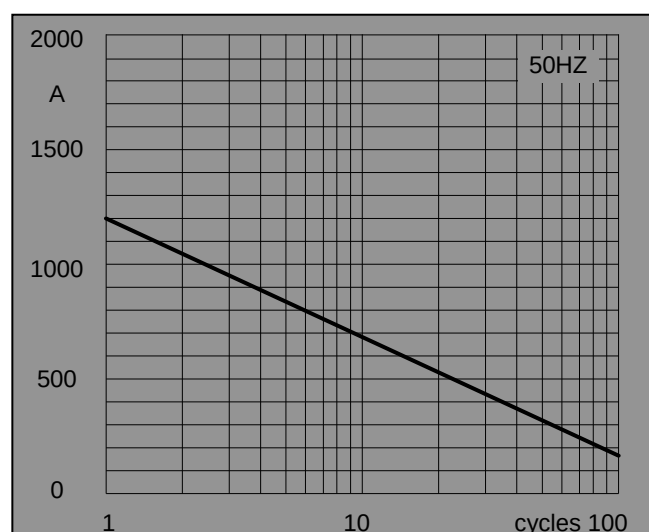


Fig4. Max Non-Repetitive Forward Surge Current

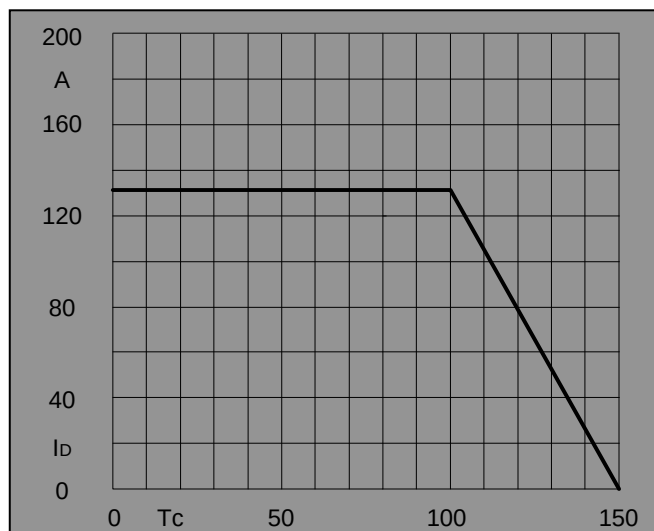
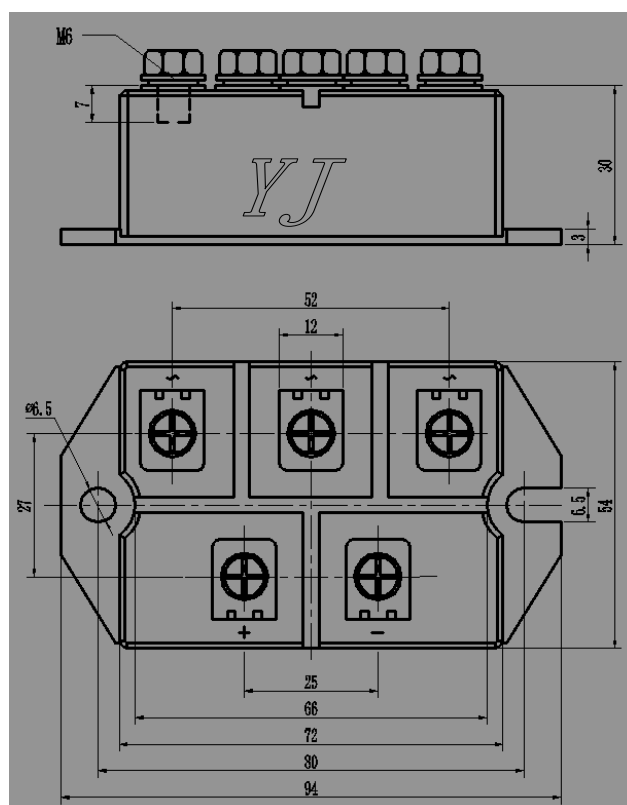


Fig5.Forward Current Derating Curve

Package Outline Information

CASE M3



Dimensions in mm