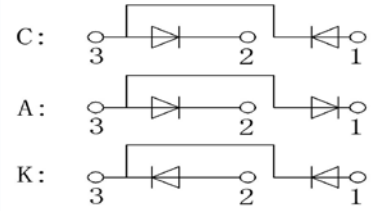
MD260C(A/K)-D3

RoHS COMPLIANT

Rectifier Diode Modules

V_{RRM} 800 to 1800V
I_{FAV} 260 A

Circuit



Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

Features

- Blocking voltage: 800 to 1800V
- Heat transfer through aluminum oxide ceramic isolated metal baseplate

Module Type

TYPE			V_{RRM}	V_{RSM}
MD260C08D3	MD260A08D3	MD260K08D3	800V	900V
MD260C12D3	MD260A12D3	MD260K12D3	1200V	1300V
MD260C16D3	MD260A16D3	MD260K16D3	1600V	1700V
MD260C18D3	MD260A18D3	MD260K18D3	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I_{FAV}	Single phase ,half wave 180° conduction Tc=85℃	260	A
I_{FSM}	t=10mS Tvj =45℃	11000	A
i^2t	t=10mS Tvj =45℃	605000	A^2s
V_{isol}	a.c.50HZ;r.m.s.;1min	3000	V
T_{vj}		-40 to 130	℃
T_{stg}		-40 to 125	℃
Mt	To terminals(M8)	9±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	650	g

Thermal Characteristics

Symbol	Conditions	Values	Units
$R_{th(j-c)}$	Per diode	0.08	℃/W
$R_{th(c-s)}$	Module	0.05	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{FM}	T=25℃ I_F =750A	—	—	1.25	V
I_{RD}	$T_{vj}=T_{vj_M}$ $V_{RD}=V_{RRM}$	—	—	15	mA

Performance Curves

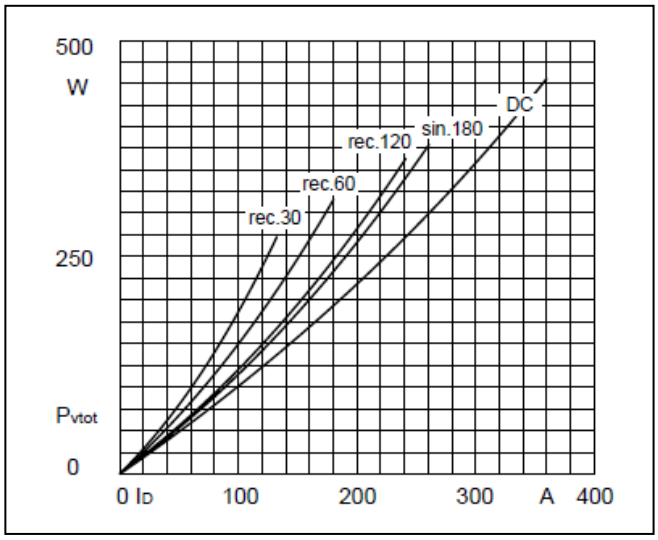


Fig1. Power dissipation

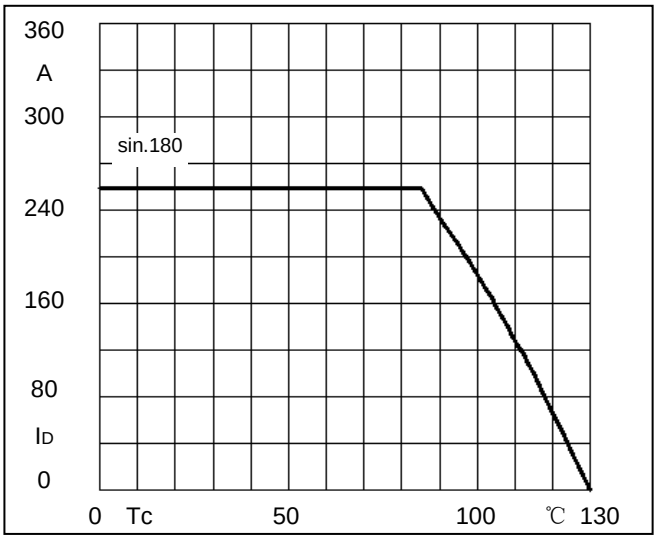


Fig2.Forward Current Derating Curve

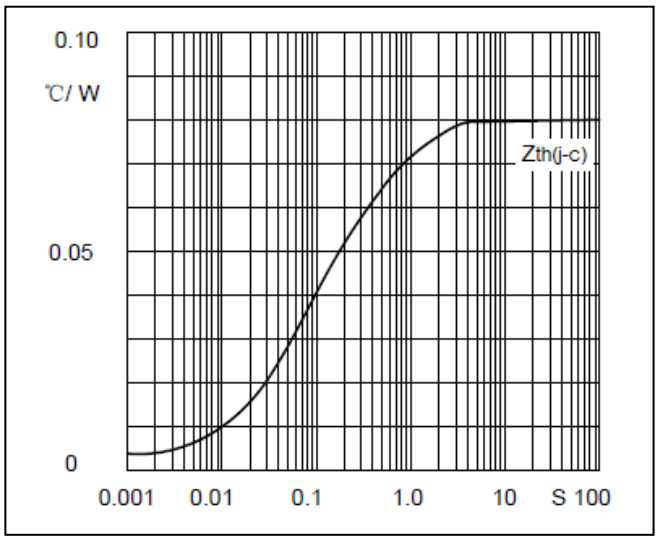


Fig3. Transient thermal impedance

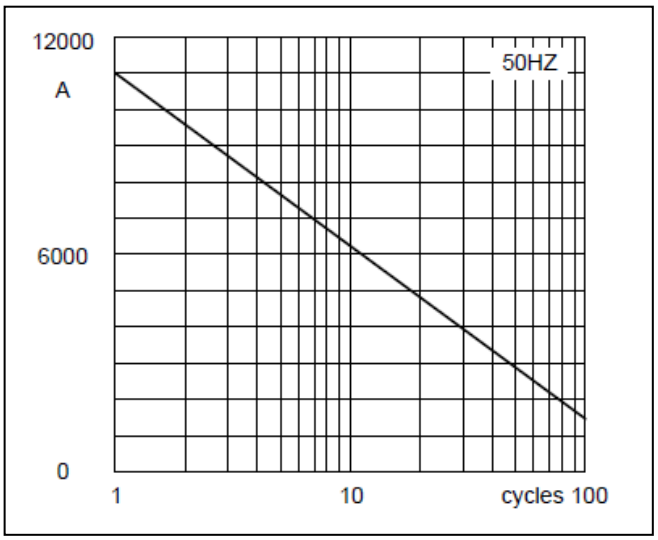


Fig4. Max Non-Repetitive Forward Surge Current

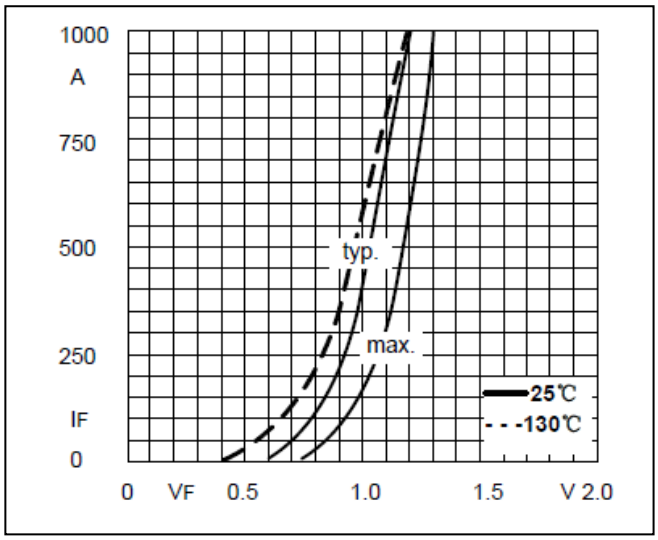
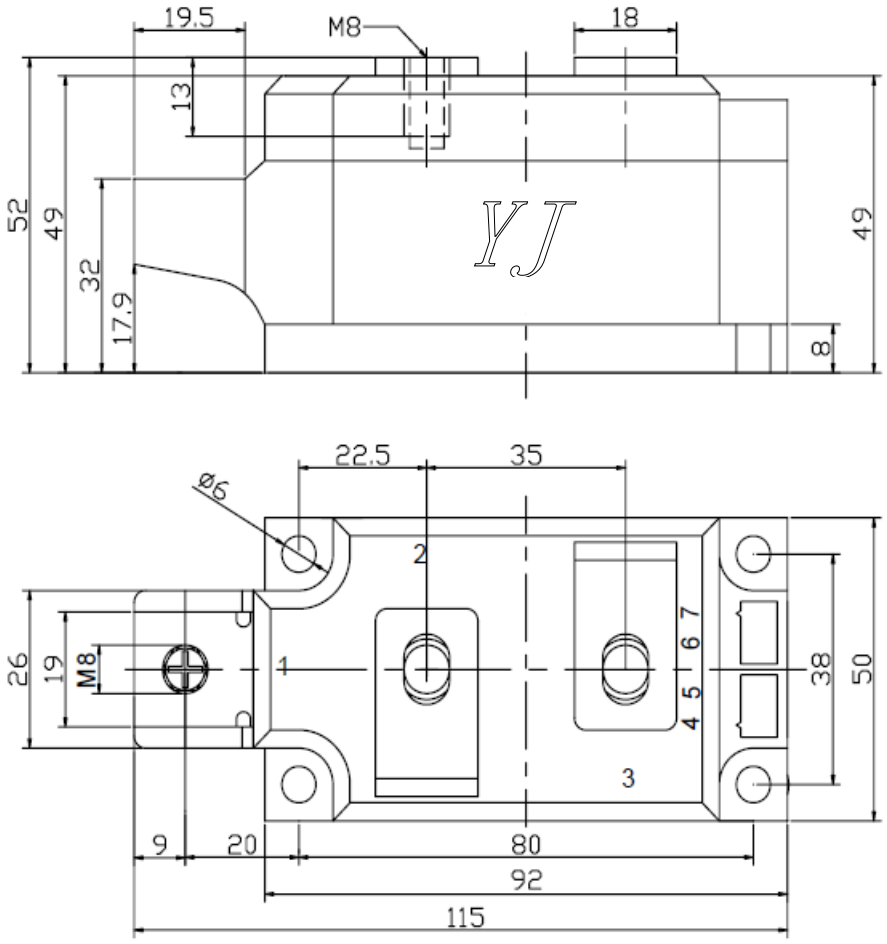


Fig5. Forward Characteristics

Package Outline Information

CASE: D3



Dimensions in mm