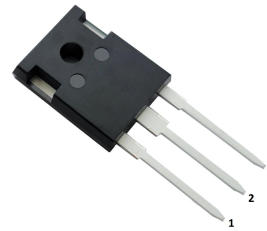


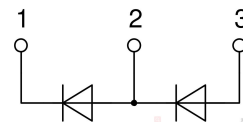
Features

- Planar passivated chips
- Very low leakage current
- Very low forward voltage drop
- Improved thermal behaviour



Applications

- Diode for main rectification
- For single and three phase bridge configurations



Absolute Maximum Ratings($T_c=25^{\circ}\text{C}$)

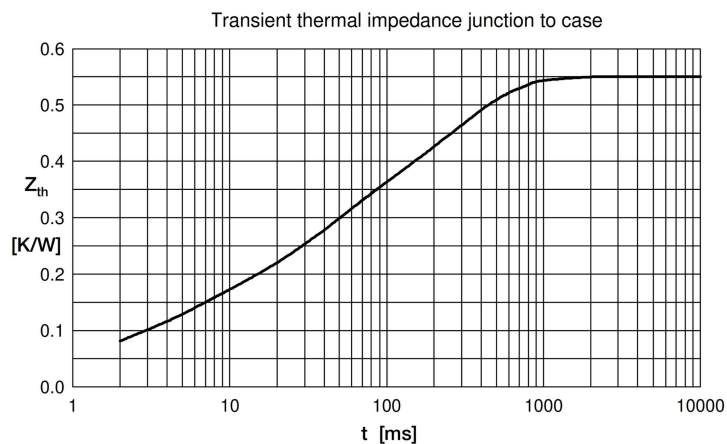
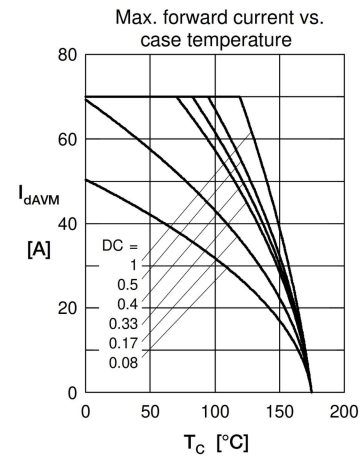
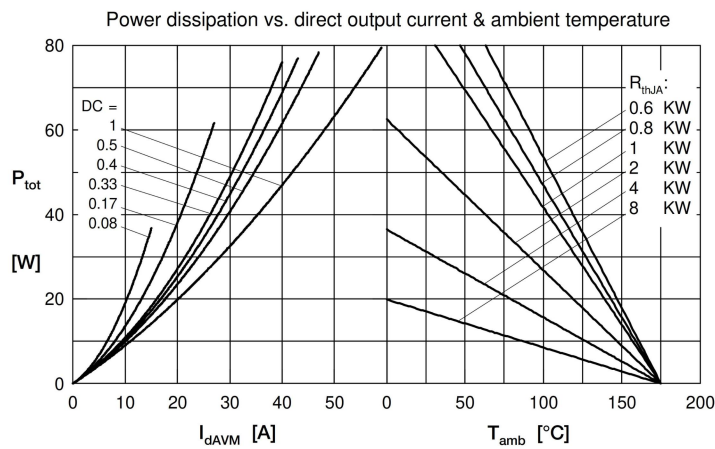
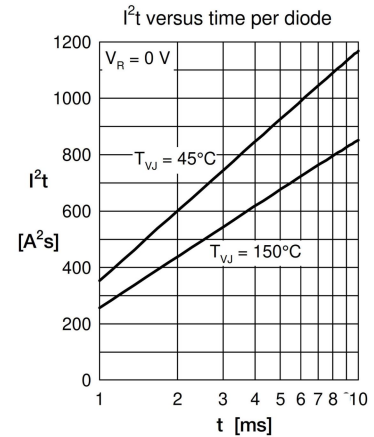
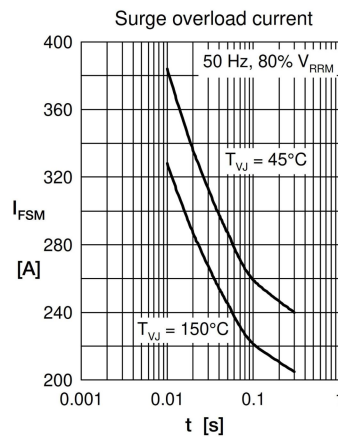
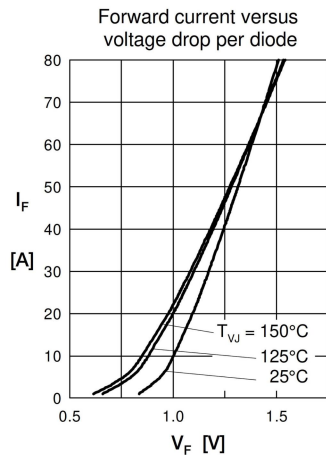
Parameter	Symbol	Test Conditions		Values	Unit
Repetitive Peak Reverse Voltage	V_{RRM}			1800	V
Reverse current,drain current	I_R	$V_R=1800V$	$T_c=25^{\circ}C$	40	μA
			$T_c=125^{\circ}C$	1.5	mA
Forward voltage drop (per diode)	V_F	$I_F=45A$	$T_c=25^{\circ}C$	1.26	V
		$I_F=90A$		1.57	V
Surge Current	I_{FAV}	$T_c=125^{\circ}C$		45	A
Threshold voltage	V_{F0}	For power loss calculation only $T_c=125^{\circ}C$		0.81	V
Slope resistance	r_F			9.1	mΩ
Forward surge current	I_{FSM}	$T=10ms,(50Hz),sine,$ $V_R=0V$		480	A
Value for fusing	I^2t	$T=10ms,(50Hz),sine,$ $V_R=0V$		1.15	KA ² S
Power Dissipation	P_{tot}			270	W
Junction Temperature	T_J			-40~175	℃
Storage Temperature Range	T_{STG}			-40~150	
Thermal Resistance junction to case	$R_{\theta JC}$			0.55	℃/W
Thermal Resistance case to heatsink	$R_{\theta ch}$			0.25	℃/W

Electrical Characteristics($T_c=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Recovery Time	t_{rr}	$I_F=45\text{A}, V_R=900\text{V},$	-	9.8	-	μs

Reverse Recovery Charge	Q_{rr}	$di_F/dt=100A/\mu s$	-	12	-	μC
Junction capacitance	C_J	$V_R=400V$ $f=1MHz$	-	18	-	pF
Mounting torque	M_D		0.8	-	1.2	Nm
Mounting force with clip	F_C		20	-	120	N

Electrical characteristics(Curves)



Package outline dimension

