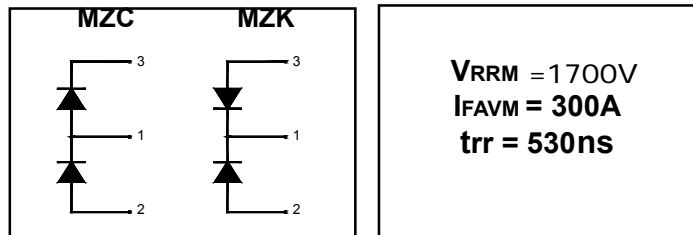


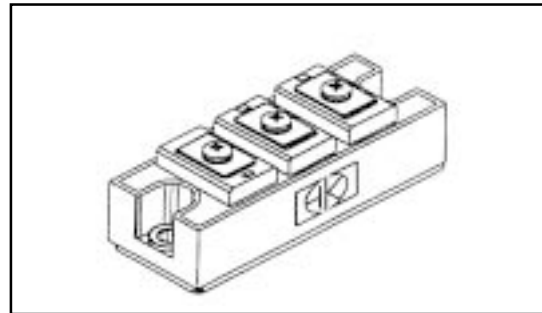
Features

- International standard package
With DBC ceramic base plate
- Planar passivated chips
- Short recovery time
- Low switching losses
- Ultra-soft recovery behaviour
- Industry standard package
- UL recognition pending



Benefits

- Antiparallel diode for high frequency switching devices
- antisaturation diode , snubber diode
- Direct mounting to heatsink
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders
- inductive heating and melting ,
- free wheeling diode in converters and motor control circuits
- Low voltage peaks for reduced



Absolute Maximum Ratings

Symbol	Test Conditions	Max.	Units
V_{RSM} & V_{RRM}		1700	V
I_F	DC Forward current	300	A
I_{FRM}	$t_p < 10\mu s$; rep. rating, pulse width limited by T_{VJM}	600	A
I_{FSM}	$T_{VJ} = 45^\circ C$; $t = 10ms$ (50 Hz), sine	2200	A
	$t = 8.3ms$ (60 Hz), sine	2400	A
	$T_{VJ} = 150^\circ C$; $t = 10ms$ (50 Hz), sine	~	A
	$t = 8.3ms$ (60 Hz), sine	~	A
I^2t	$T_{VJ} = 45^\circ C$; $t = 10ms$ (50 Hz), sine	12100	A ² s
	$t = 8.3ms$ (60 Hz), sine	12000	A ² s
	$T_{VJ} = 150^\circ C$; $t = 10ms$ (50 Hz), sine	~	A ² s
	$t = 8.3ms$ (60 Hz), sine	~	A ² s
V_{ISOL}	RMS Isolation Voltage, Any Terminal To Case, $t = 1$ min	2500	V
P_D	$T_C = 25^\circ C$	1040	W
T_J	Operating Junction Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-40 to +125	

Thermal / Mechanical Characteristics

	Parameter	Typ.	Max.	Units
R _{θJS}	Thermal Resistance, Junction-to- Sink DC	-	0.21	
R _{θJC}	Thermal Resistance, Junction-to- Case DC	-	0.12	°C/W
R _{θCS}	Thermal Resistance, Case-to- Sink- Module	0.08	-	
	Mouting Torque, Case-to-Heatsink	-	4.0	N.m
	Mouting Torque, Case-to-Terminal 1,2 & 3	-	3.0	
	Weight of Module	200	-	g

Electrical Characteristics (unless otherwise specified)

	Parameter	Min.	Typ.	Max.	Units	Conditions
V _{RRM}	Reverse Breakdown Voltage	1700	-	-	V	I _R =0.5mA
I _R	Diode Leaking Current	-	-	1.0	mA	T _{VJ} =25°C V _R =V _{RRM}
		-	-	0.5	mA	T _{VJ} =25°C V _R =0.8V _{RRM}
		-	-	5.0	mA	T _{VJ} =125°C V _R =V _{RRM}
V _F	Diode Forward Voltage	-	-	1.80	V	I _F =300A; T _{VJ} = 25°C
		-	-	1.95	V	T _{VJ} =125°C
		-	-	1.90	V	T _{VJ} =150°C
		-	-	~		
V _{FO}	For power-loss calculations only	-	-			
r _F		-	-			V _J =150 °C
tr _r @T _{VJ} =125°C	Diode Reverse Recovery Time	-	720	-	ns	I _F =300A
I _{RM} @T _{VJ} = 25°C	Diode Peak Reverse Current	-	90	-	A	V _R =900V
I _{RM} @T _{VJ} =125°C	Diode Peak Reverse Current	-	105	-	A	-di/dt=1050A/s

Case Outline - int-a-pak

