JMD200KD16T2W

Diode Module

Features

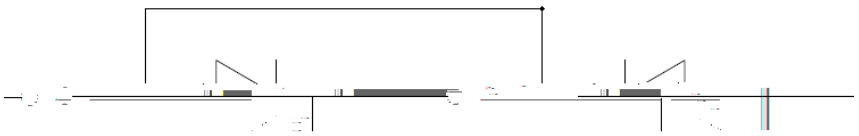
- A package of series of two diodes
- Heat transfer through alumina ceramic and metal substrate
- Welding by vacuum welding technology, which provide high reliability

Product Summary

Parameter	Value	Unit
V_{RRM}	1600	V
$I_{F(AV)}$(@ T_C = 100℃)	200	A
I_{FSM}(@ t_P = 10ms)	5800	A
V_F(Max)	1.60	V

Applications

- AC converter
- Inverter
- DC moto



Absolute Maximum Ratings (@ T_C = 25℃ unless otherwise specified)

Parameter	Conditions	Symbol	Values	Unit
Repetitive peak reverse voltage	T_{vj} = 25℃	V_{RRM}	1600	V
Non-repetitive peak reverse voltage	T_{vj} = 25℃	V_{RSM}	1700	V
Average forward current	T_C = 100℃	$I_{F(AV)}$	200	A
Forward surge current	1/2 cycle, Sine wave, 50Hz T_{vj} = 25℃	I_{FSM}	5800	A
I^2t value for fusing		I^2t	168200	A^2s
RMS isolation voltage	A.C 50Hz(1s/1min)	V_{ISO}	3600/3000	V
Junction temperature range		T_J	-40 ~ +150	
Storage temperature range		T_{stg}	-40 ~ +125	

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Electrical Characteristics (@ T_C = 25℃ unless otherwise specified)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Peak forward voltage	I_F=600A, t_P=380μs	V_F			1.60	V
Reverse leakage current	$V_R = V_{RRM}$, T_{vj} = 25℃	I_{RRM}			100	μA
	$V_R = V_{RRM}$, T_{vj} = 150℃				60	mA
Threshold voltage	T_{vj} = 150℃, for power loss calculation only	V_{TO}			0.78	V
Dynamic resistance		r_T			1.05	mΩ

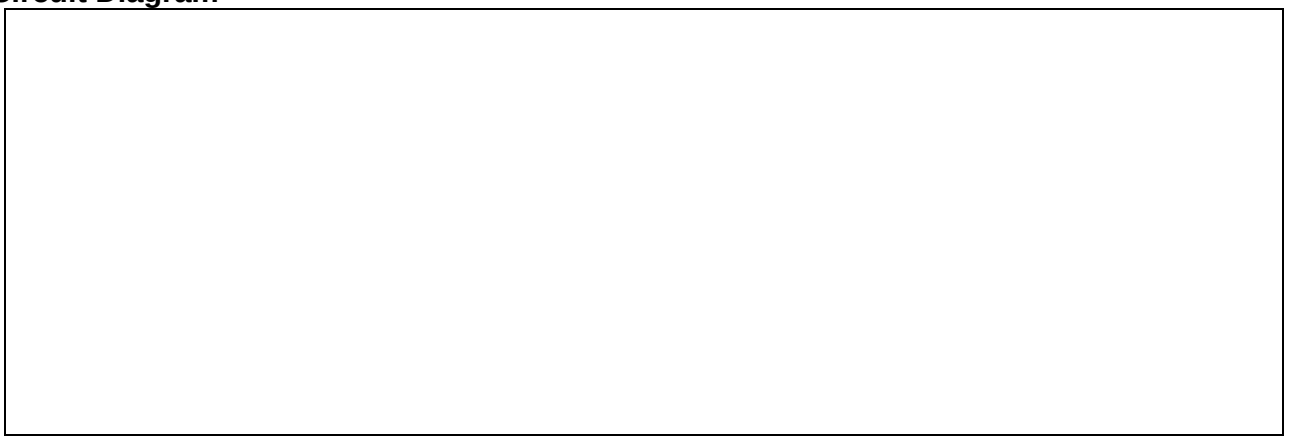
Thermal Characteristics (@ T_C = 25℃ unless otherwise specified)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Thermal resistance, junction to case	per diode	R_{th}			5.75	
					.25	
					5.75	

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Typical Electrical & Thermal Characteristics

Circuit Diagram



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