

D02-XX00  
RECTIFIER DIODE

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT	
				Min	Type	Max		
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz single side cooled, T <sub>HS</sub> =55°C	150			287	A	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz single side cooled, T <sub>HS</sub> =90°C	150			204	A	
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>RRM</sub> +100V	150	100		2000	V	
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			30	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	150			2.8	KA	
I <sup>2</sup> T	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					40	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			1.28	V	
r <sub>F</sub>	Forward slop resistance						1.12	mΩ
V <sub>FM</sub>	Peak on-state voltage	I <sub>TM</sub> =600A	150			2.0	V	
I <sub>rm</sub>	Reverse recovery current	I <sub>TM</sub> =300A, tp=1000μs, di/dt=-20A/μs, V <sub>R</sub> =50V	150			50	A	
t <sub>rr</sub>	Reverse recovery time						4	μs
Q <sub>rr</sub>	Recovery charge						100	μC
R <sub>th(j-h)</sub>	Thermal resistance Junction to heatsink	At 180° sine single side cooled Clamping torque 27 N·m				0.16	°C /W	
F <sub>m</sub>	Mounting torque			25		30	N·m	
T <sub>stg</sub>	Stored temperature			-40		160	°C	
Outline	D3							

Outline

