

Features

- Low forward voltage drop
- Soft recovery
- Hermetic metal cases with ceramic insulators

I_{F(AV)} 710 A
V_{RRM} 1100 ~ 2000V
t_{rr} 3.0 μs

Typical Applications

- Inverters and choppers
- Motor control
- Snubber and free-wheeling diodes

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _J (°C)	VALUE			UNIT
					Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled,	T _C =85°C	150			710	A
V _{RRM}	Repetitive peak reverse voltage	t _p =10ms		150	1100		2000	V
I _{RRM}	Repetitive peak current	at V _{RRM}		150			40	mA
I _{FSM}	Surge forward current	10ms half sine wave		150			9	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					405	A ² s*10 ³
V _{FO}	Threshold voltage			150			1.30	V
r _F	Forward slope resistance						0.42	mΩ
V _{FM}	Peak forward voltage	I _{TM} =1200A, F=7.0kN		25			2.60	V
I _{rm}	Reverse recovery current	I _{TM} =1000A, t _p =4000μs, di/dt=-60A/μs, V _R =100V		150		42		A
t _{rr}	Reverse recovery time					3.0		μs
Q _{rr}	Recovery charge					63	90	μC
R _{th(j-c)}	Thermal resistance Junction to case	D.C. double side cooled Clamping force 7.0kN					0.045	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.010		
F _m	Mounting force				5.3		10	kN
T _{vj}	Junction temperature				-40		150	°C
T _{stg}	Stored temperature				-40		160	°C
W _t	Weight					80		g
Outline	P33							

Outline:

