

Features

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

I_{F(AV)} 2175 A
V_{R(RM)} 4000 ~ 5000V
t_{rr} 12 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			2175	A
V _{R(RM)}	Repetitive peak reverse voltage	tp=10ms		150	4000		5000	V
I _{R(RM)}	Repetitive peak current	at V _{R(RM)}		150			240	mA
I _{FSM}	Surge forward current	10ms half sine wave		150			30	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{R(RM)}		150			4500	A ² s*10 ³
V _{FO}	Threshold voltage			150			1.65	V
r _F	Forward slope resistance			150			0.25	mΩ
V _{FM}	Peak forward voltage	I _{TM} =3000A, F=40kN		25			3.00	V
I _m	Reverse recovery current			150		320		A
t _{rr}	Reverse recovery time	I _{TM} =2000A, tp=4000μs, di/dt=-60A/μs, V _R =100V		150		12		μs
Q _{rr}	Recovery charge			150		1900	2200	μC
R _{th(j-c)}	Thermal resistance Junction to case	D.C.: double side cooled					0.010	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink	Clamping force40kN					0.003	
F _m	Mounting force				35		47	kN
T _{vj}	Junction temperature				-40		150	°C
T _{stg}	Stored temperature				-40		160	°C
W _t	Weight					1100		g
Outline	P46a							

Outline:

