

Features

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

I_{F(AV)} 3560 A
V_{RRM} 1100 ~ 2000V
t_{rr} 7.0 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			3560	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms	150	1100		2000	V
I _{RRM}	Repetitive peak current	at V _{RRM}	150			240	mA
I _{FSM}	Surge forward current	10ms half sine wave V _R =0.6V _{RRM}	150			44	kA
I ² t	I ² t for fusing coordination					9680	A ² s*10 ³
V _{FO}	Threshold voltage		150			0.95	V
r _F	Forward slope resistance					0.10	mΩ
V _{FM}	Peak forward voltage	I _{TM} =5000A, F=40kN	25			3.00	V
I _m	Reverse recovery current	I _{TM} =2000A, tp=4000μs, di/dt=-60A/μs, V _R =100V	150		310		A
t _{rr}	Reverse recovery time				7		μs
Q _{rr}	Recovery charge				1100	1300	μC
R _{th(j-c)}	Thermal resistance Junction to case	D.C.: double side cooled Clamping force 40kN				0.010	°C/W
R _{th(c-h)}	Thermal resistance case to heat sink					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:

