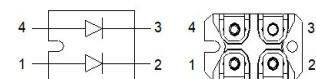


HFME120W40

Ultrafast Rectifier Module,2x60A

FEATURES

- Two fully independent diodes
- Fully insulated package
- Ultrafast, soft reverse recovery, with high operation junction temperature (175°C T_j)
- Low forward voltage drop
- Optimized for power conversion:welding and industrial SMPS applications
- Easy to use and parallel
- Industry standard outline
- Designed and qualified for industrial level



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	TEST CONDITIONS	MAX	UNIT
Cathode to anode voltage	V_R		400	V
Continuous forward current per diode	I_F	$T_C=90^{\circ}\text{C}$	60A	A
Single pulse forward current per diode	I_{FSM}	$T_C=25^{\circ}\text{C}$	800	A
RMS isolation voltage	V_{ISOL}	Any terminal to case, $t=1$ minute	2500	V
Operating junction and storage temperatures	T_J, T_{STG}		-55 to 175	$^{\circ}\text{C}$

ELECTRICAL SPECIFICATIONS(per diode)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
DC forward voltage	V_F	$I_F=60\text{A} \quad T_J=25^{\circ}\text{C}$		1.2		V
DC reverse current	I_R	$V_R=400\text{V} \quad T_J=25^{\circ}\text{C}$		5		μA
		$V_R=400\text{V} \quad T_J=125^{\circ}\text{C}$		1		mA
Reverse recovery time	t_{rr}	$I_F=1.0\text{A}, dI_F/dt=200\text{A}/\mu\text{s}, V_R=30\text{V}$	-	40	-	nS
		$T_J=25^{\circ}\text{C}$	-	75		
		$T_J=125^{\circ}\text{C}$		150		
Peak recovery current	I_{RRM}	$T_J=25^{\circ}\text{C}$		10		A
		$T_J=125^{\circ}\text{C}$		20		
Reverse recovery charge	Q_{rr}	$T_J=25^{\circ}\text{C}$		500		nC
		$T_J=125^{\circ}\text{C}$		1750		

THERMAL-MECHANICAL SPECIFICATIONS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Junction to case ,single leg conducting	R_{thjc}		-	-	0.43	$^{\circ}\text{C}/\text{W}$
Junction to case ,both leg conducting			-	-	0.215	
Case to heatsink	R_{thcs}	Flat,greased surface		0.05		
Weight				30		g
Mounting torque				1.3		Nm

DIMENSIONS in millimeters

SOT-227 package

