XI'AN IR-PERI Company

PRELIMINARY

MDQ55TP160

Diode Modules TP-PAK

Features

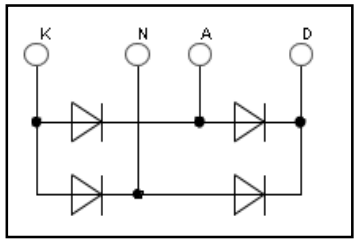
International standard package

With DBC ceramic

High surge capability

Complies With RoHS Directive;

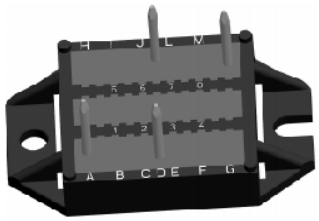
Lead Free;



I_{DAVM} =55A
V_{RRM} = 1600V

Benefits

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Field supply for DC motors
- Battery DC power supplies



Absolute Maximum Ratings

Symbol	Test Conditions	Max.	Units
V_{RRM}		1600	V
I_D	T_C=100 °C, module	55	A
I_{FSM}	T_{VJ}=45 °C; t=10ms (50 Hz),sine	300	A
	V_R=0 t=8.3ms (60 Hz),sine	325	A
	T_{VJ}=150 °C; t=10ms (50 Hz),sine	255	A
	V_R=0 t=8.3ms (60 Hz),sine	275	A
I^2t	T_{VJ}=45 °C; t=10ms (50 Hz),sine	450	A^2s
	V_R=0 t=8.3ms (60 Hz),sine	440	A^2s
	T_{VJ}=150 °C; t=10ms (50 Hz),sine	325	A^2s
	V_R=0 t=8.3ms (60 Hz),sine	315	A^2s
V_{ISOL}	RMS Isolation Voltage, Any Terminal To Case, t=1 min	2500	V
T_{VJ}		-40 to +150	°C
T_{VJM}		150	
T_{STG}		-40 to +125	

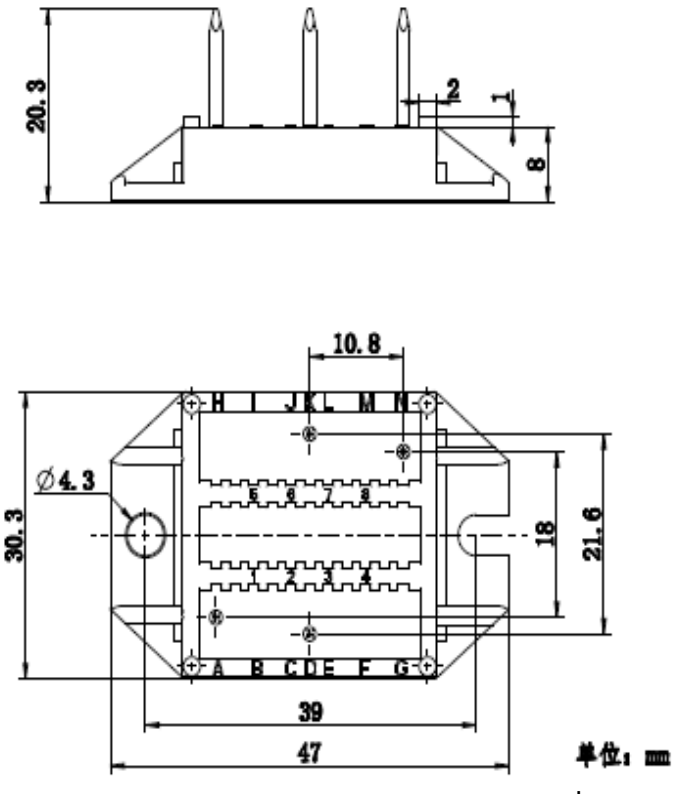
Termal / Mechanical Characteristics

	Parameter	Typ.	Max.	Units
R_{thJC}	thermal resistance junction to case	-	1.1	K/W
R_{thCH}	thermal resistance case to heatsink	0.4	-	K/W
	Weight of Module	15.7	-	g

Electrical Characteristics (unless otherwise specified)

	Parameter	Min.	Typ.	Max.	Units	Conditions
I_R	Diode Leaking Current	-	-	0.1	mA	T_{VJ}=25°C V_R=V_{RRM}
		-	-	1	mA	T_{VJ}=125°C V_R=V_{RRM}
V_F	Diode Forward Voltage	-	-	1.3	V	I_F=40A T_{VJ}=25°C

Case Outline - TP-pak



Data and specifications subject to change without notice.