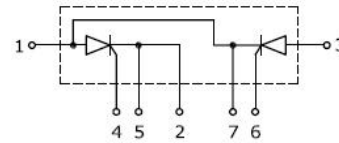


PRELIMINARY DATASHEET
**1600V 55A, Phase Control Thyristor,
 Half-Bridge Configuration in iQPak® Power
 Module Package**

FEATURES

- High voltage
- Low on-state voltage
- Suitable for over voltage control, motor control circuit and heating control system
- Industrial standard package
- Pb-free finished; **RoHS Compliant**


MAXIMUM RATINGS (per Leg), T_c = 25°C unless otherwise noted

Parameter	Symbol	Value	Units
Average on-state current T _c = 75 °C, 180° conduction half sine wave	I _{T(AV)}	55	A
Continuous RMS on-state current as AC switch	I _{T(RMS)}	86	
Non-repetitive surge peak on-state current T _J = 125 °C, t _p = 10 ms, applied rated V _{RRM}	I _{TSM}	1000	
I ⁺ t value for fusing T _J = 125 °C, t _p = 10 ms, applied rated V _{RRM}	I ⁺ t	5000	A·s
Peak gate current T _J = 125 °C	I _{GM}	2.5	A
Maximum repetitive peak off-state voltage I _R = 100uA	V _{DRM}	1600	V
Maximum repetitive reverse voltage I _R = 100uA	V _{RRM}	1600	
Maximum reverse leakage current	I _{RRM}	0.2	mA
Maximum direct leakage current	I _{DRM}	0.2	
Operating junction and storage temperature	T _J , T _{stg}	-40... +125	°C

Thermal Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R _{thJC}	0.44	°C /W
Isolation voltage, RMS (measured between terminals and mounting base, 50-60 Hz, for 1-3 seconds)	V _{iso}	3000	V

