

广东钜兴电子科技有限公司



## **Maximum Ratings and Electrical Characteristics**

Rating at  $25^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristics		SYM	40SQ045	Unit
Maximum Repetitive Peak Reverse Voltage		Vrrm	45	V
Maximum RMS Voltage		Vrms	31.5	V
Maximum DC Blocking Voltage		Vdc	45	V
Maximum Average Forward Rectified Current @ Tc=25 °C		l(AV)	40	А
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,		IFSM	500	A
Superimposed on Rated Load (JEDEC Method)				
Peak Forward Voltage at 40A DC (Note1)		Vf	0.5	V
Maximun DC Reverse Current at Rated DC Blocking Voltage	@Tj=25℃	IR	0.1	mA
	@Tj=100°C		20	
Typical Thermal Resistance Junction to Case		Rejc	1.5	°C/W
Junction Temperature Range		TJ	-55 to+200	°C
Storage Temperature Range		Tstg	-55 to+150	°C

Notes: 1. 300uS pulse width, 2%duty cycle.

2. The typical data above is for reference only.



## **Rating and Characteristic Curves**



Fig. 1 - Forward Current Derating Curve

600 500 400 300 200 100 0 1 10 100 Number of Cycles at 60Hz

Fig. 4 - Typical Forward Characteristics



Fig. 3 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

Instantaneous Forward Voltage (V)

