



**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	135(40CPQ135) 150(40CPQ150)	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C = 145^\circ\text{C}$ , rectangular wave form	40	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	$I_{FSM}$	8.3 ms, half Sine pulse	432	A

**Electrical Characteristics:**

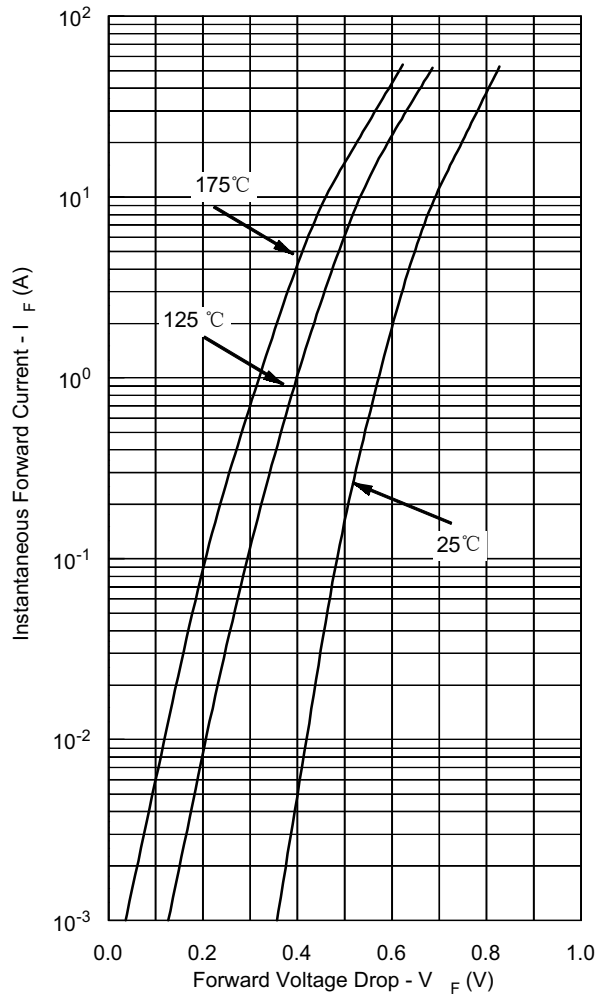
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (per leg)*	$V_{F1}$	@ 20 A, Pulse, $T_J = 25^\circ\text{C}$	0.84	V
	$V_{F2}$	@ 20 A, Pulse, $T_J = 125^\circ\text{C}$	0.68	V
Max. Reverse Current (per leg)*	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	1.5	mA
	$I_{R2}$	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	15	mA
Max. Junction Capacitance (per leg)	$C_T$	@ $V_R = 5\text{V}$ , $T_C = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$	900	pF

\* Pulse Width < 300 $\mu\text{s}$ , Duty Cycle <2%**Thermal-Mechanical Specifications:**

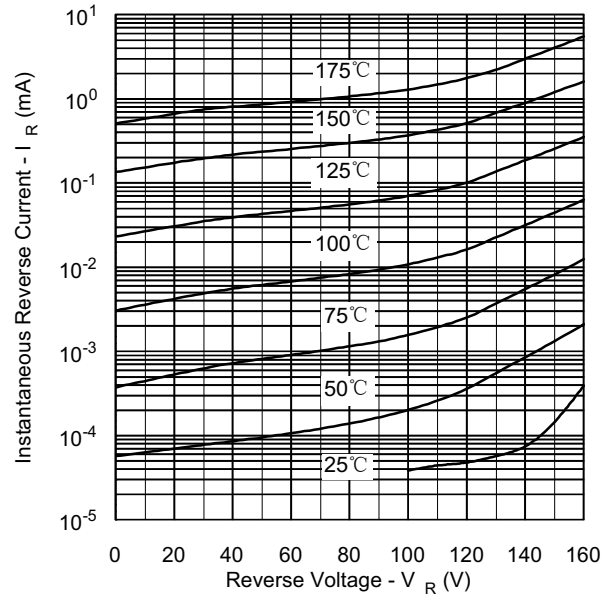
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +175	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-55 to +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.63(per leg)	$^\circ\text{C/W}$
			0.31(per package)	
Maximum Thermal Resistance, Case to Heat Sink	$R_{\theta CS}$	Mounting surface, smooth and greased	0.24	$^\circ\text{C/W}$
Approximate Weight	wt	-	6	g
Mounting Torque	$T_M$	-	6 (min) 12 (max)	Kg-cm
Case Style	TO-247			



**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**

