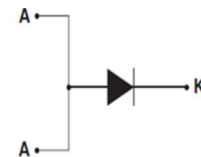


## Features

- Ultra Low  $V_F=0.40V$  at  $I_F=10A$  (25°C)/ $V_F=0.54 V$  at  $I_F=30A$  (25°C)
- Thin Package:1.0mm
- Low forward voltage drop, low power loss
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



Power QFN5x6



Schematic Diagram

## Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.1grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 3000 units per reel

## Maximum Ratings & Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise noted)

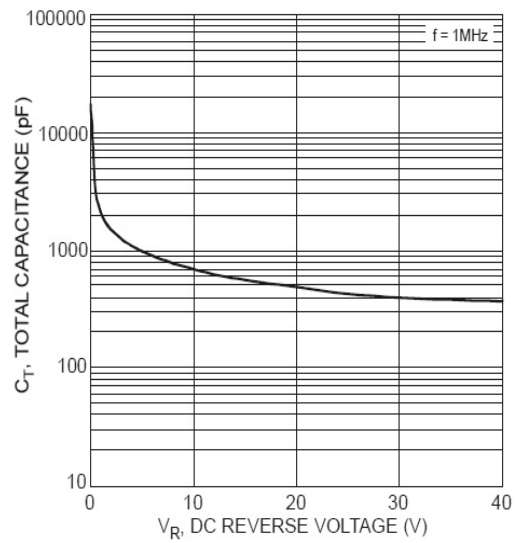
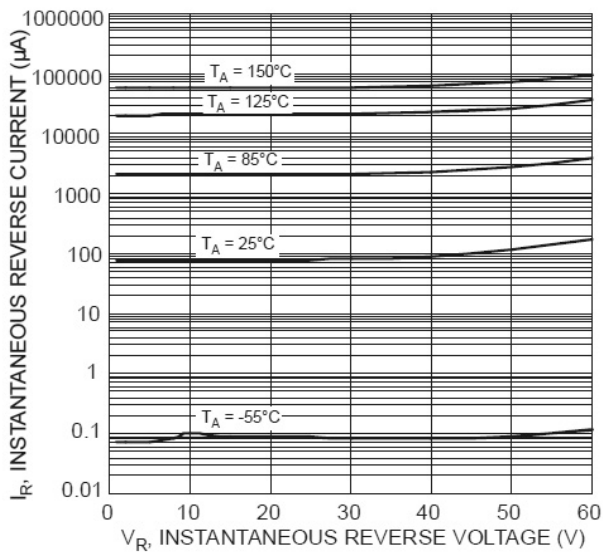
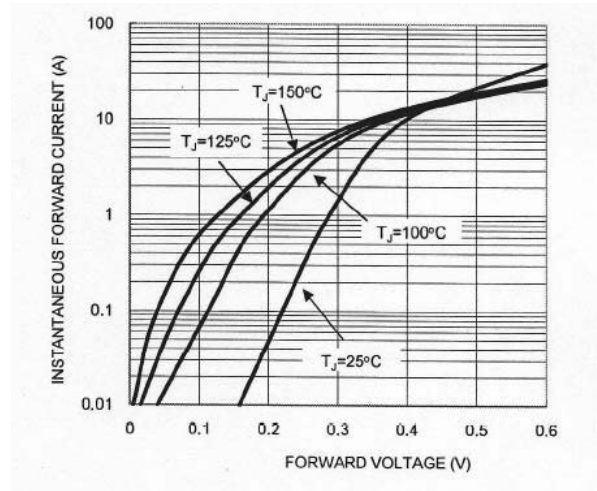
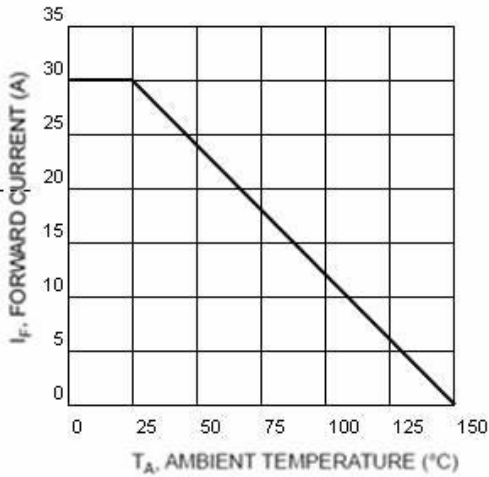
Parameter	Symbol	Test Conditions	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$		60	V
Working Peak Reverse Voltage	$V_{RWM}$		60	V
Maximum DC Blocking Voltage	$V_{DC}$		60	V
Maximum Average Forward Rectified Current @ $T_c=105^\circ C$	$I_F(AV)$	Total Device Per Diode	30	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode	$I_{FSM}$		200	A
Peak Repetitive Reverse Current per Leg at $t_p=2.0\mu s$ , 1KHz	$I_{RRM}$		2.0	A
Operating Junction Temperature Range	$T_J$		-55 to +150	$^\circ C$
Storage Temperature Range	$T_{STG}$		-55 to +150	$^\circ C$
Maximum Instantaneous Forward Voltage per Leg	$V_F$	$I_F=30A$ $T_c=25^\circ C$ $I_F=30A$ $T_c=125^\circ C$	0.59(0.54TYP) 0.51	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	$I_R$	$T_J=25^\circ C$ $T_J=100^\circ C$	500 50	$\mu A$ $\mu A$

## Thermal Characteristics

Parameter	Symbol	Typ.	Unit
Thermal Resistance, Junction to Case per Leg	$R_{\theta JC}$	2.5	$^\circ C/W$
Thermal Resistance, Junction to Ambient per Leg	$R_{\theta JA}$	50	$^\circ C/W$

Note: Pulse test:300us pulse width, duty cycle=2%

## Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)



## Package Outline Dimensions Power QFN5x6

