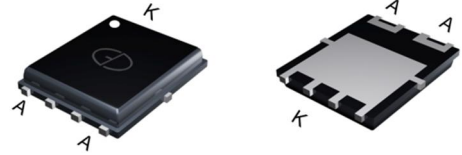
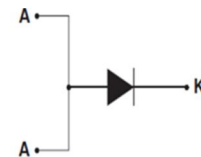


Features

- 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)

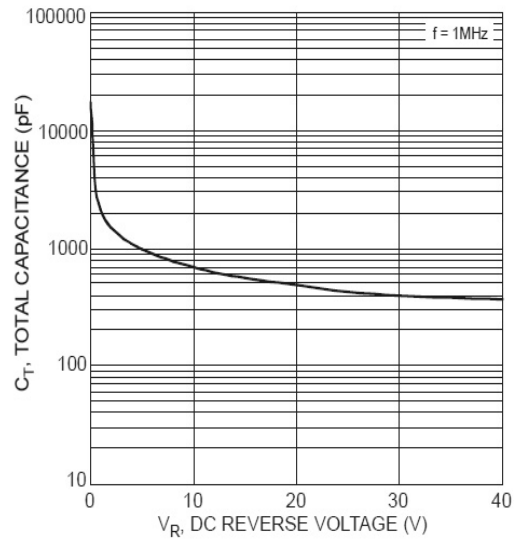
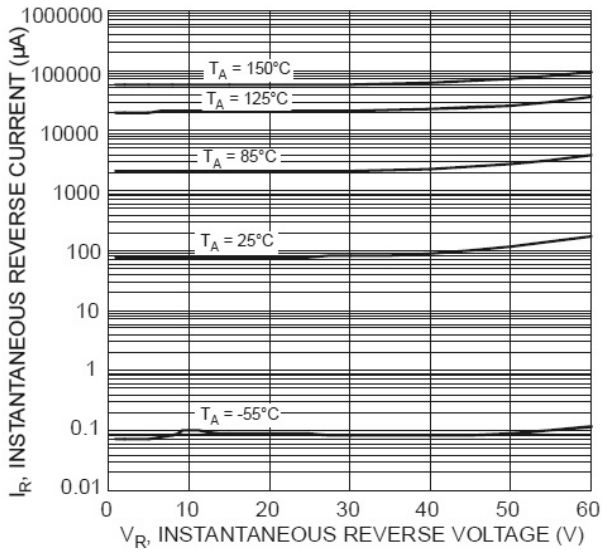
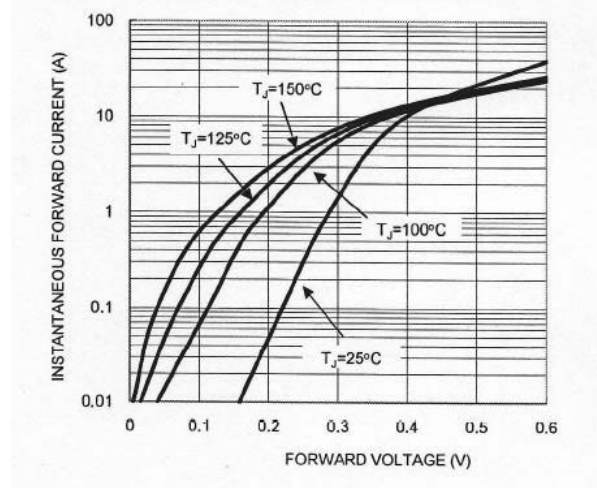
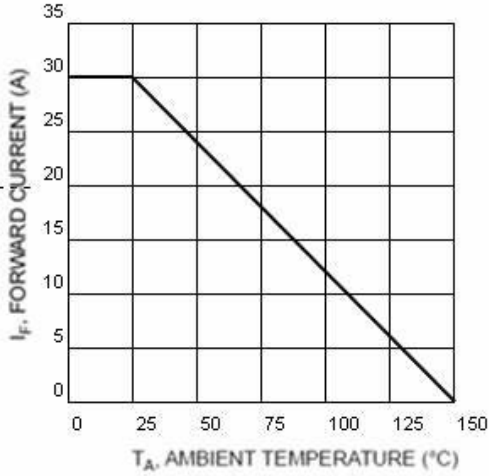
Parameter	Symbol	Test Conditions	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}		60	V
Working Peak Reverse Voltage	V_{RWM}		60	V
Maximum DC Blocking Voltage	V_{DC}		60	V
Maximum Average Forward Rectified Current @ $T_c=105^\circ C$	$I_F(AV)$	Total Device Per Diode	30	A
Peak Forward Surge 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	°C
Storage Temperature Range	T_{STG}		-55 to +150	°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	μA μA

Thermal Characteristics

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

