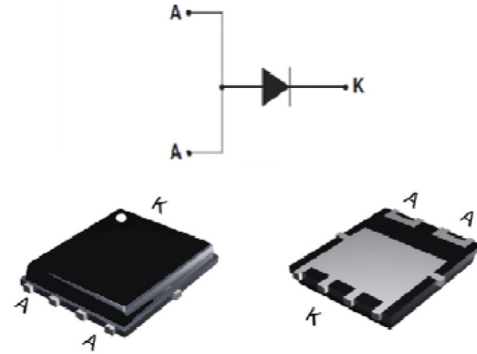


Features

- Thin Package:1.0mm
- Low forward voltage drop, low power losses
- High efficiency operation
- Halogen Free Plastic package has underwriters Laboratory Flammability Classification 94V-0

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



Package: POWER QFN5x6

Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise noted)

PARAMETER	TEST CONDITIONS		SYMBOL	MBRP3200	UNIT
Maximum repetitive peak reverse voltage			V _{RRM}	200	V
Working peak reverse voltage			V _{RWM}	200	V
Maximum DC blocking voltage			V _{DC}	200	V
Maximum average forward rectified current at T _c =105°C total device per diode			I _{F(AV)}	3	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I _{FSM}	70	A
Peak repetitive reverse current per leg at t _p =2.0us ,1KHz			I _{RRM}	0.5	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	I _F =3A I _F =3A	T _C =25°C T _C =125°C	V _F	0.92 0.87	V
Maximum reverse current per leg at working peak Reverse voltage		T _J =25°C T _J =100°C	I _R	200 15	uA mA

Thermal Characteristics T_A=25°C unless otherwise noted

Symbol	Parameter	TYP (POWER QFN 5x6)	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.5	°C /W
RθJA	Thermal Resistance, Junction to Ambient per Leg	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)

FIG.1 FORWARD CURRENT DERATING CURVE

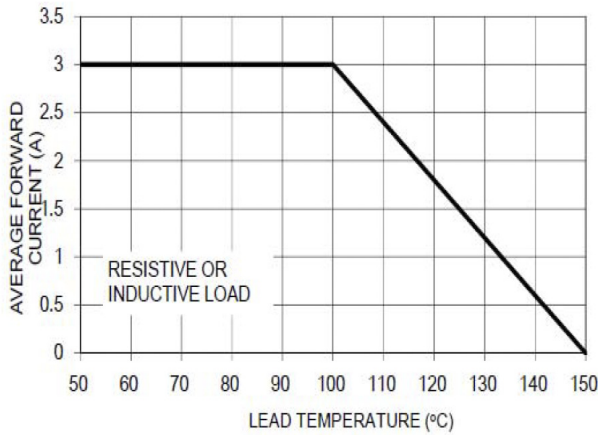


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

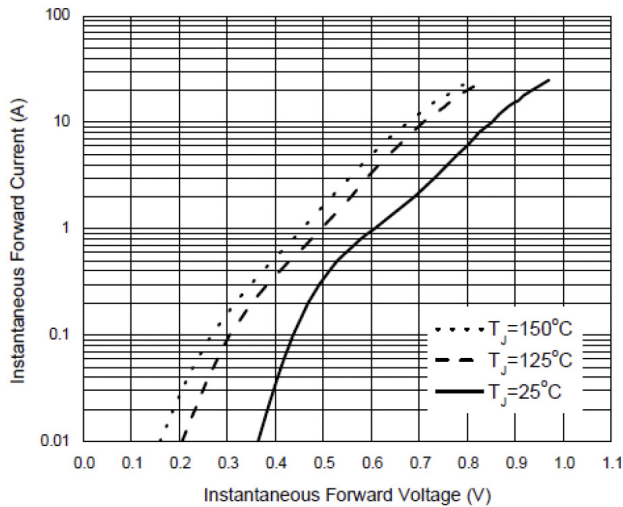
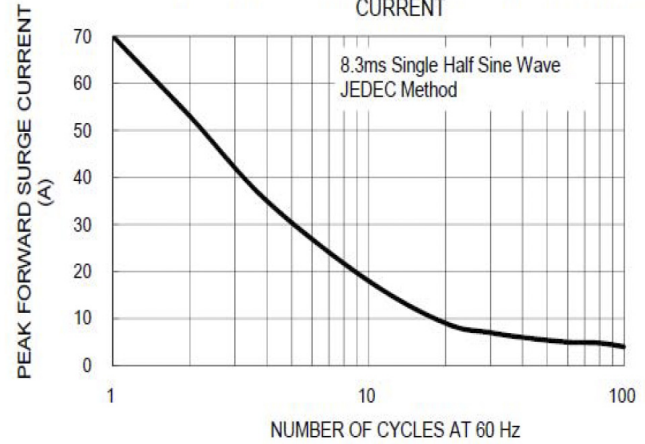


Figure 3. Typical Forward Characteristics

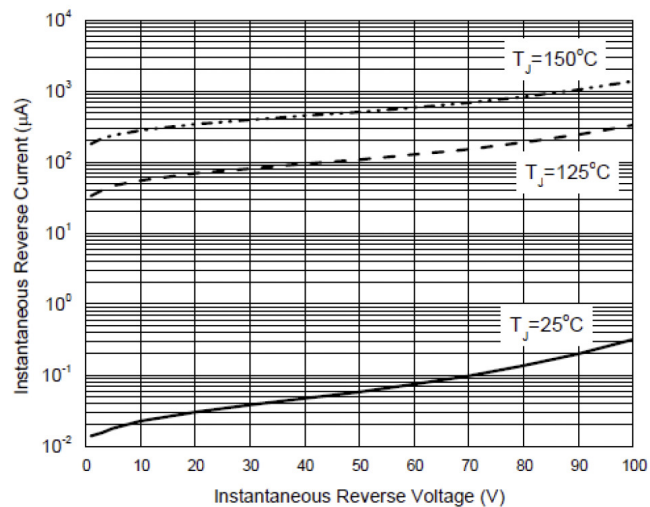


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions

Unit: millimeters

POWER QFN 5x6

