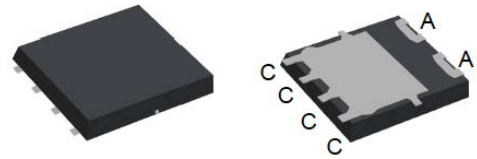
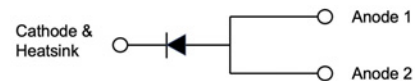


Features

- Planar MOS schottky barrier diode
- Low forward voltage drop
- Low profile - typical body height 1.0 mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10s
- Halogen-free according to IEC 61249-2-21 definition



Power QFN5x6



Schematic Diagram

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Average Forward Rectified Current	I _{F(AV)}	12	A
Peak Forward Surge Current (8.3ms Single Half Sine-Wave Superimposed on Rated Load)	I _{FSM}	160	A
Operating Junction Temperature Range	T _J	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	Value		Unit
			Typ	Max	
Forward Voltage @ I _F =3A	T _A =25°C	V _F	0.37	0.4	V
	T _A =125°C		0.31	0.34	
Forward Voltage @ I _F =6A	T _A =25°C		0.44	0.48	V
	T _A =125°C		0.37	0.41	
Forward Voltage @ I _F =12A	T _A =25°C		0.54	0.6	V
	T _A =125°C		0.46	0.51	
Reverse Current @ V _{RRM}	T _A =25°C	I _R	50	150	μA
	T _A =125°C		30	100	mA
Typical Thermal Resistance, Junction to Case		R _{θJC}	2.5		°C/W

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

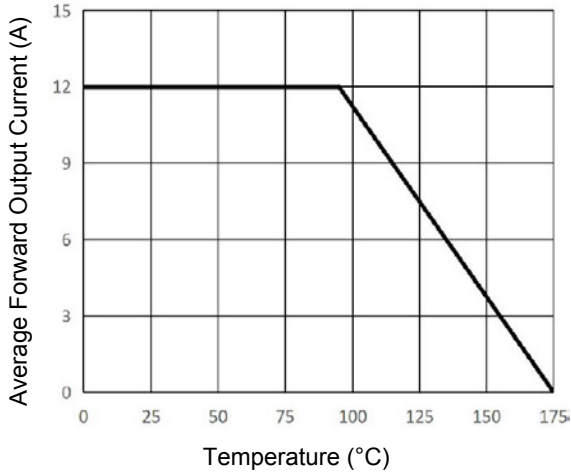


Figure 1. Forward Output Current Derating Curve

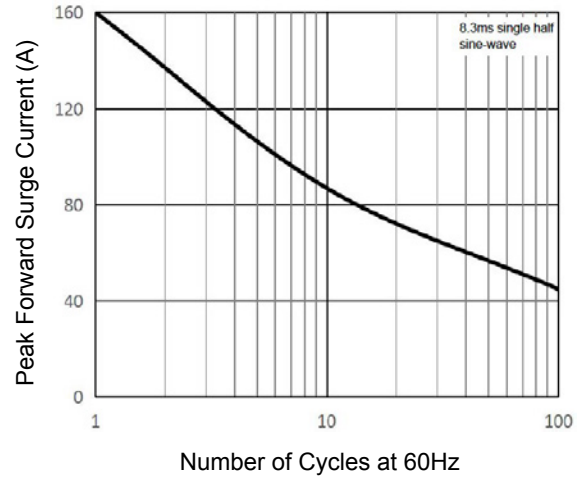


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

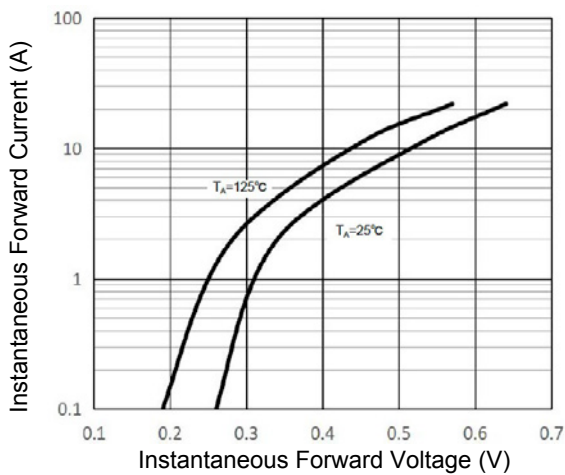


Figure 3. Typical Forward Characteristics

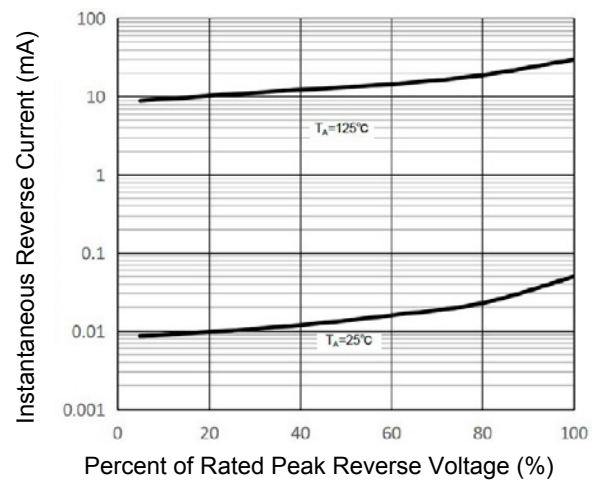
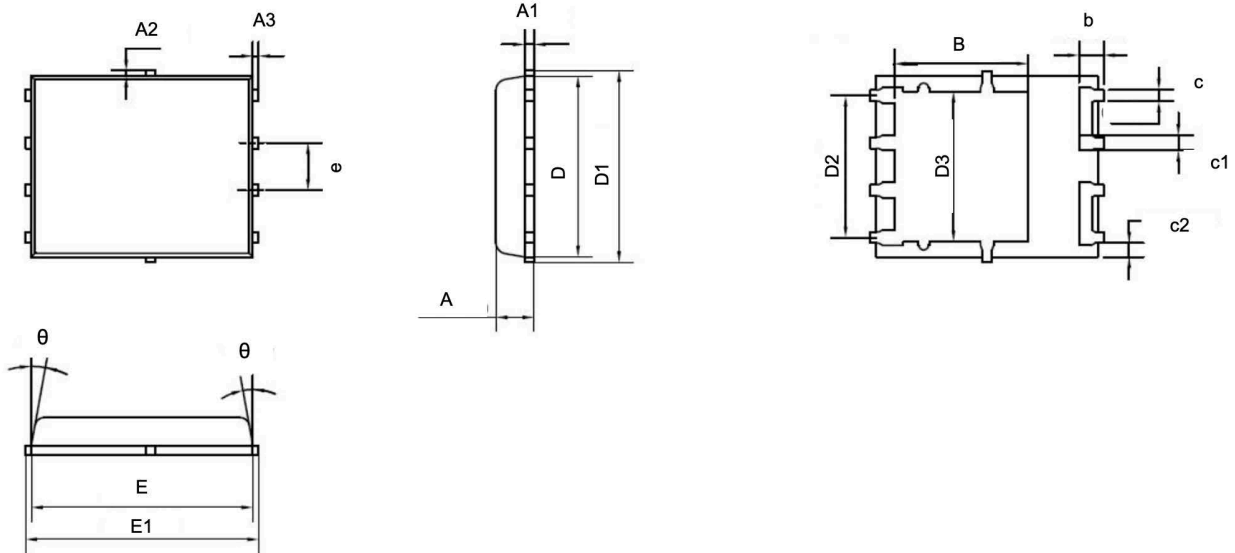


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (Power QFN5x6)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.150	0.350	0.006	0.014
A2	0.050	0.250	0.002	0.010
A3	0.050	0.250	0.002	0.010
b	0.530	0.730	0.021	0.029
B	3.500		0.138	
c	0.200	0.400	0.008	0.016
c1	0.310	0.510	0.012	0.020
c2	0.250	0.450	0.010	0.018
D	4.700	5.100	0.185	0.200
D1	5.000	5.400	0.197	0.213
D2	3.710	3.910	0.146	0.154
D3	4.000		0.157	
e	1.170	1.370	0.046	0.054
E	5.600	6.000	0.220	0.236
E1	5.900	6.300	0.232	0.248
theta	8°	12°	8°	12°