

Silicon Carbide Schottky Diode

V_{RRM}	1200V
I_F 135°C	15A
Q_c	53nC

Features

- Positive temperature coefficient
- Temperature-independent switching
- Maximum working temperature at 175 °C
- Unipolar devices and zero reverse recovery current
- Zero forward recovery current

VALUE



Device marking code			D112010PQG2
Reverse voltage (repetitive peak) @ $T_j=25^{\circ}\text{C}$	V_{RRM}	V	1200
Reverse voltage (Surge Peak) @ $T_j=25^{\circ}\text{C}$	V_{RSM}	V	1200
Reverse voltage (DC) @ $T_j=25^{\circ}\text{C}$	V_{DC}	V	1200
Continuous forward current @ $T_c=25^{\circ}\text{C}$	I_F	A	31
Continuous forward current @ $T_c=135^{\circ}\text{C}$			15
Continuous forward current @ $T_c=157^{\circ}\text{C}$			10
Non-repetitive peak forward surge current @ $T_c=25^{\circ}\text{C}$, $t_p=10\text{ms}$, Half Sine Wave	I_{FSM}	A	85
Power Dissipation@ $T_c=25^{\circ}\text{C}$	P_{TOT}	W	170
Power Dissipation@ $T_c=110^{\circ}\text{C}$			73
i^2t Value@ $T_c=25^{\circ}\text{C}$, $t_p=10\text{ms}$	$\int i^2 dt$	A^2S	36
Operating junction and Storage temperature range	T_j, T_{stg}	$^{\circ}\text{C}$	-55 to +175



Figure 3. Capacitance vs. Reverse Voltage

Figure 4. Total Capacitance Charge vs. Reverse Voltage

Figure 5. Capacitance Stored Energy

Figure 6. Power Derating

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Figure 7. Current Derating



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