



## Silicon Carbide Schottky Diode

$V_{RRM}$	1200V
$I_F(135^\circ\text{C})$	10A
$Q_C$	37nC

## Features

Positive temperature coefficient  
 Temperature-independent switching  
 Maximum working temperature at 175 °C  
 Unipolar devices and zero reverse recovery current  
 Zero forward recovery current  
 Essentially no switching losses  
 Reduction of heat sink requirements  
 AEC-Q101 qualified  
 High-frequency operation  
 Reduction of EMI

## Typical Applications

Typical applications are in power factor correction(PFC), solar inverter, uninterruptible power supply, motor drives, photovoltaic inverter, electric car and charger.

## Mechanical Data

**Package:** TO-220AC

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

**Terminals:** Tin plated leads

**Polarity:** As marked

Maximum Ratings ( $T_C=25$  Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Device marking code			D112008PQG3
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	22
Continuous forward current @ $T_C=135^\circ\text{C}$			10
Continuous forward current @ $T_C=148^\circ\text{C}$			8
Non-repetitive peak for $i^2t$		$\text{A}^2$	
Power Dissipation @ $T_C=110^\circ\text{C}$			41
$i^2t$ Value @ $T_C=25^\circ\text{C}$ , $t_p=10\text{ms}$		$\text{A}^2$	

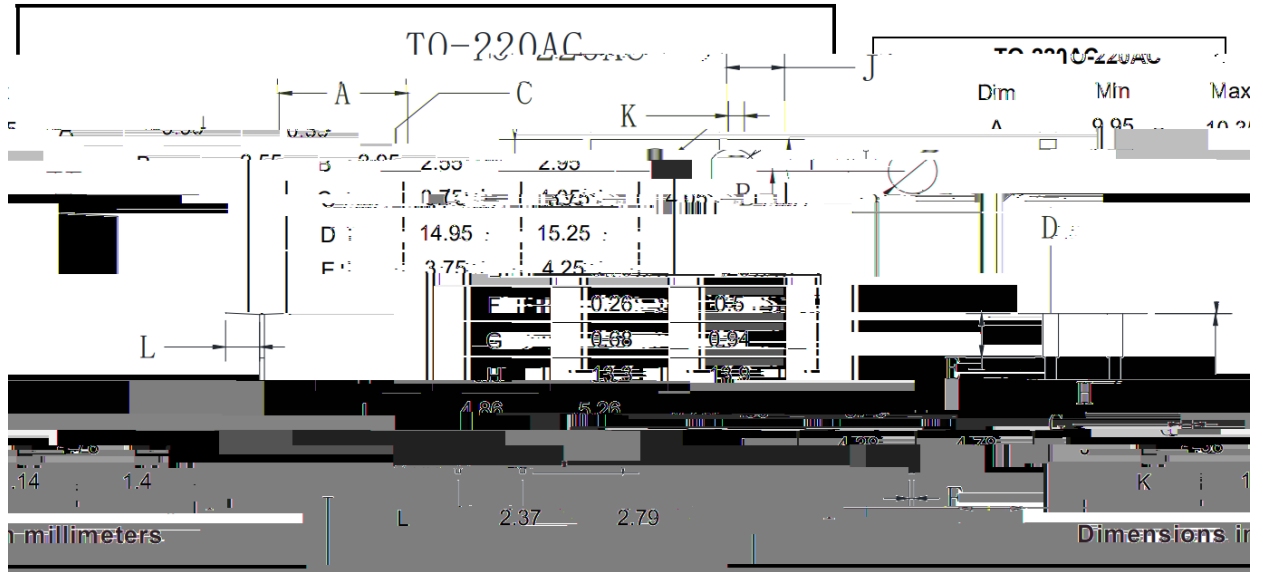


)LJXUH &DSDFLWDQFH9R0W5HY )LJXUH 7RWDO &DSDFLWDQFH &KDUJ

)LJXUH &DSDFLWDQFH 6WRUHG (Q•0



Outline Dimensions





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