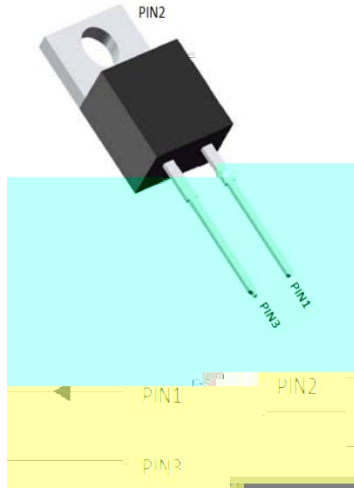


$V_{RRM}$	650V
$I_F$ 135°C	3.6A
$Q_C$	5.2nC



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

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

: TO-220AC

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

: Tin plated leads

: As marked

( $T_C=25$  Unless otherwise specified)

Device marking code			D106502PQG3
Reverse voltage (repetitive peak) @ $T_j=25^\circ\text{C}$	$V_{RRM}$	V	650
Reverse voltage (Surge Peak) @ $T_j=25^\circ\text{C}$	$V_{RSM}$	V	650
Reverse voltage (DC) @ $T_j=25^\circ\text{C}$	$V_{DC}$	V	650
Continuous forward current @ $T_c=25^\circ\text{C}$	$I_F$	A	7.6
Continuous forward current @ $T_c=135^\circ\text{C}$			3.6
Continuous forward current @ $T_c=160^\circ\text{C}$			2
Non-repetitive peak forward surge current @ $T_c=25^\circ\text{C}$ , $t_p=10\text{ms}$ , Half Sine Wave	$I_{FSM}$	A	20
Power Dissipation @ $T_c=25^\circ\text{C}$	$P_{TOT}$	W	45

Power Dissipation @  $T_c=110^\circ\text{C}$

19

4

1

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Forward voltage drop	$V_F$	V	$I_F=2A, T_J=25^{\circ}C$	1.5	1.6
			$I_F=2A, T_J=175^{\circ}C$	2.2	-
Reverse leakage current	$I_R$	$\mu A$	$V_R=650V, T_J=25^{\circ}C$	0.1	10
			$V_R=650V, T_J=175^{\circ}C$	1	-
Total capacitive charge	$Q_C$	nC	$V_R$		



