

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
- **Terminals:** Tin plated leads
- **Polarity:** As marked

■Maximum Ratings ($T_c=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Device marking code			D106504PQG3
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	12
Continuous forward current @ $T_c=135^{\circ}\text{C}$			5.8
Continuous forward current @ $T_c=154^{\circ}\text{C}$			4
Non-repetitive peak forward surge current @ $T_c=25^{\circ}\text{C}$, $t_p=10\text{ms}$, Half Sine Wave	I_{FSM}	A	40
Power Dissipation@ $T_c=25^{\circ}\text{C}$	P_{TOT}	W	64
Power Dissipation@ $T_c=110^{\circ}\text{C}$			28
i^2t Value@ $T_c=25^{\circ}\text{C}$, $t_p=10\text{ms}$	$\int i^2 dt$	A^2S	8
Operating junction and Storage temperature range	T_j, T_{stg}	$^{\circ}\text{C}$	-55 to +175

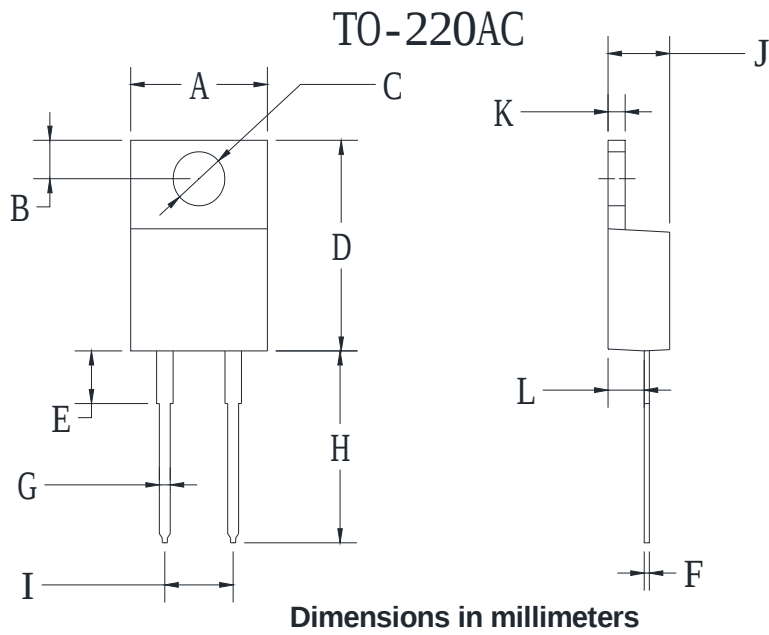


■Electrical Characteristics

PARAMTETER	SYMBOL	UNIT	TEST CONDITIONS	Typ.	Max.
Forward voltage drop	V_F	V	$I_F=4A, T_J=25^{\circ}C$	$=U_f \Sigma$	



■Outline Dimensions



TO-220AC		
Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.75	4.05
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5



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