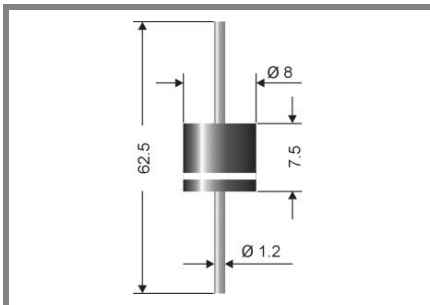


# P 600 A...P 600 S



## Axial lead diode

## Standard silicon rectifier diodes

### P 600 A...P 600 S

**Forward Current: 6 A**

**Reverse Voltage: 50 to 1200 V**

### Features

- Max. solder temperature : 260°C
- Plastic material has UL classification 94V-0

### Mechanical Data

- Plastic case 8 x 7.5 [ mm ] / P-600 Style
- Weight approx.: 1.5 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 500 pieces per ammo

1) Valid, if leads are kept at  $T_A$  at a distance of 10 mm from case

2)  $I_F = 5A$ ,  $T_j = 25^\circ C$

3)  $T_A = 25^\circ C$

4) Thermal resistance from junction to lead/terminal at a distance 0 mm from case

5) Max. junction temperature  $T_j \leq 200^\circ C$  in bypass mode / DC forward mode

Type	Repetitive peak reverse voltage $V_{RRM}$ V	Surge peak reverse voltage $V_{RSM}$ V	Max. reverse recovery time $I_F = -A$ $I_R = -A$ $I_{RR} = -A$ $t_{rr}$ ns	Max. forward voltage $V_F^{2)}$
P 600 A	50	50	-	1,0
P 600 B	100	100	-	1,0
P 600 D	200	200	-	1,0
P 600 G	400	400	-	1,0
P 600 J	600	600	-	1,0
P 600 K	800	800	-	1,0
P 600 M	1000	1000	-	1,0
P 600 S	1200	1200	-	1,0

Absolute Maximum Ratings		$T_A = 25^\circ C$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$I_{FAV}$	Max. averaged fwd. current, R-load, $T_A = 50^\circ C$ 1)	6	A
$I_{FRM}$	Repetitive peak forward current $f > 15 Hz$ 1)	60	A
$I_{FSM}$	Peak forward surge current 50 Hz half sinus-wave 3)	400	A
$i^2t$	Rating for fusing, $t < 10 ms$ 3)	800	A <sup>2</sup> s
$R_{thA}$	Max. thermal resistance junction to ambient 1)		K/W
$R_{thL}$	Max. thermal resistance junction to terminals 4)	5,5	K/W
$T_j$	Operating junction temperature	-50...+175 ( $T_j \leq 200^\circ C$ in bypass mode 5) )	$^\circ C$
$T_s$	Storage temperature	-50...+175	$^\circ C$

Characteristics		$T_A = 25^\circ C$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$I_R$	Maximum leakage current, $T_j = 25^\circ C$ ; $V_R = V_{RRM}$	<25	$\mu A$
	$T_j = ^\circ C$ ; $V_R = V_{RRM}$		
$C_j$	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
$Q_{rr}$	Reverse recovery charge ( $U_R = V$ ; $I_F = A$ ; $di_F/dt = A/ms$ )	-	$\mu C$
$E_{RSM}$	Non repetitive peak reverse avalanche energy ( $I_R = mA$ ; $T_j = ^\circ C$ ; inductive load switched off)	-	mJ

