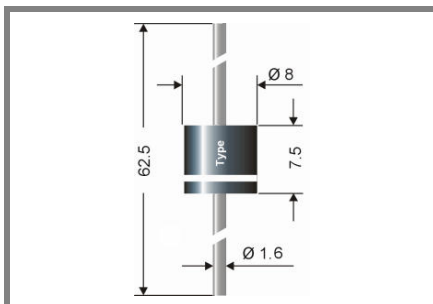


# HE15FATL...HE15FGTL



## Axial lead diode

Type	Repetitive peak reverse voltage $V_{RRM}$ V	Surge peak reverse voltage $V_{RSM}$ V	Max. reverse recovery time $I_F = 0,5$ A $I_R = 1$ A $I_{RR} = 0,25$ A $t_{rr}$ ns	Max. forward voltage $V_F^{(2)}$
HE 15FATL	50	50	200	0,82
HE 15FBTL	100	100	200	0,82
HE 15FDTL	200	200	200	0,82
HE 15FGTL	400	400	200	0,84

## High efficiency fast silicon rectifier diode

### HE15FATL...HE15FGTL

**Forward Current: 15 A**

**Reverse Voltage: 50 to 400 V**

Preliminary Data

### Features

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

### Mechanical Data

- Plastic case: 8 x 7,5 [mm]
- Weight approx.: 2,0g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 500 pieces per ammo or 1000 pieces per reel

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

2)  $I_F = 5$  A,  $T_j = 25$  °C

3)  $T_A = 25$  °C

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

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

Absolute Maximum Ratings		$T_A = 25$ °C, unless otherwise specified	
Symbol	Conditions	Values	Units
$I_{FAV}$	Max. averaged fwd. current, R-load, $T_A = 50$ °C <sup>1)</sup>	15	A
$I_{FRM}$	Repetitive peak forward current $f > 15$ Hz <sup>1)</sup>	85	A
$I_{FSM}$	Peak forward surge current 50 Hz half sinus-wave <sup>3)</sup>	700	A
$i^2t$	Rating for fusing, $t < 10$ ms <sup>3)</sup>	2450	A <sup>2</sup> s
$R_{thA}$	Max. thermal resistance junction to ambient <sup>1)</sup>		K/W
$R_{thL}$	Max. thermal resistance junction to terminals <sup>4)</sup>	<1,8	K/W
$T_j$	Operating junction temperature	-50...+175 ( $T_j \leq 200$ °C <sup>5)</sup> )	°C
$T_s$	Storage temperature	-50...+175	°C

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

