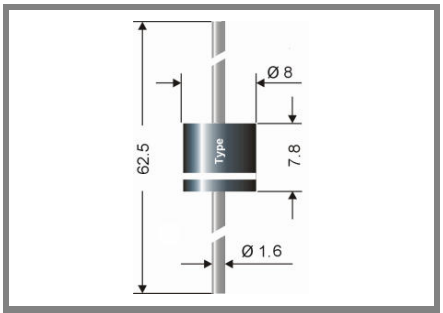
HE25FATL ... HE25FGTL



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 25FATL	50	50	200	0,82
HE 25FBTL	100	100	200	0,82
HE 25FDTL	200	200	200	0,82
HE 25FGTL	400	400	200	0,84

High efficiency fast silicon rectifier diode

HE25FATL ... HE25FGTL

Forward Current: 25 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 7,8 [mm]
- Weight approx.: 3,0 g
- 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 0 mm from case
2) I_F = 5 A, Tj = 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 temperatue Tj ≤ 200°C in bypass mode / DC forward mode

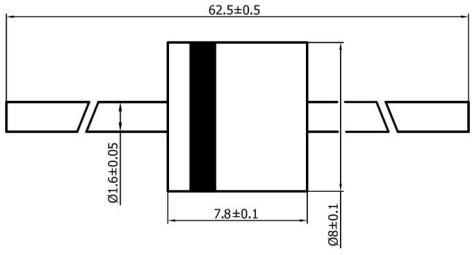
Absolute Maximum Ratings T_A = 25 °C, unless otherwise specified

Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C [1]	25	A
I_{FRM}	Repetitive peak forward current f > 15 Hz [1]	85	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave [3]	700	A
i²t	Rating for fusing, t < 10 ms [3]	2450	A²s
R_{thA}	Max. thermal resistance junction to ambient [1]		K/W
R_{thL}	Max. thermal resistance junction to terminals [4]	<1,0	K/W
T_j	Operating junction temperature	- 50 ... + 175(Tj ≤ 200 °C in bypass mode [5])	°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

Dimensions in mm



case: 8 x 7,5 [mm]

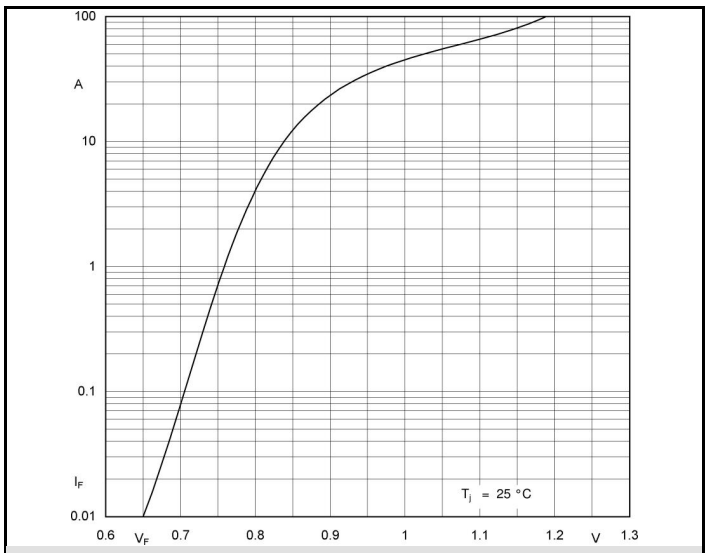


Fig. 1 Forward characteristics (typical values)

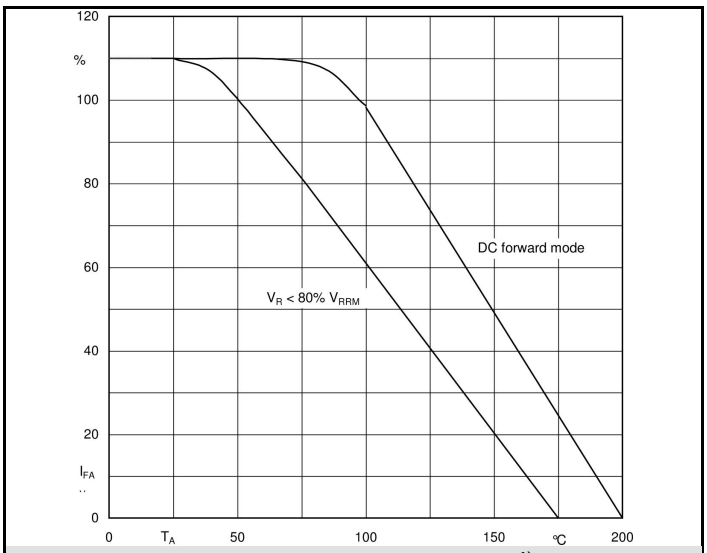


Fig. 2 Rated forward current vs. ambient temperature [1)]

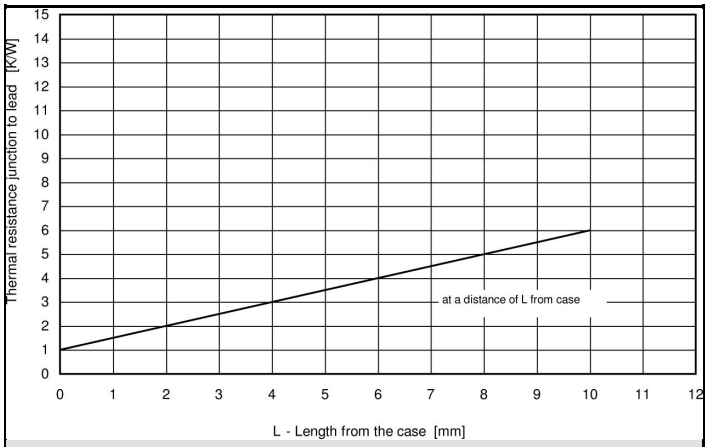


Fig. 3 Thermal resistance versus distance from case

