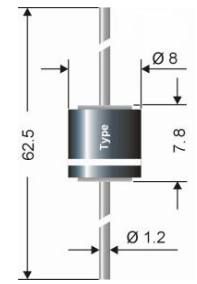
HE25FA ... HE25FG



Axial lead diode

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)]
HE 25FA	50	50	200	0,82
HE 25FB	100	100	200	0,82
HE 25FD	200	200	200	0,82
HE 25FG	400	400	200	0,82

High efficiency fast silicon rectifier diode

HE25FA ... HE25FG

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.: 2,4 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 ambient temperature at 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 ≤185°C in reverse mode V_R=50%V_{RRM}, Tj ≤200°C in bypass mode

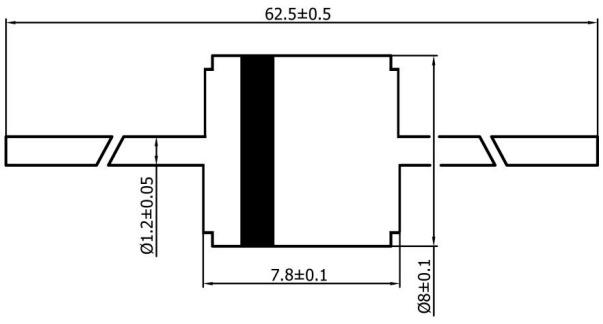
Absolute Maximum Ratings TA = 25 °C, unless otherwise specified

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)]	0,8	K/W
T_j	Operating junction temperature	- 50 ... + 175(Tj≤200°C[5)])	°C
T_s	Storage temperature	- 50 ... + 175	°C

Characteristics TA = 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 7,8[mm]

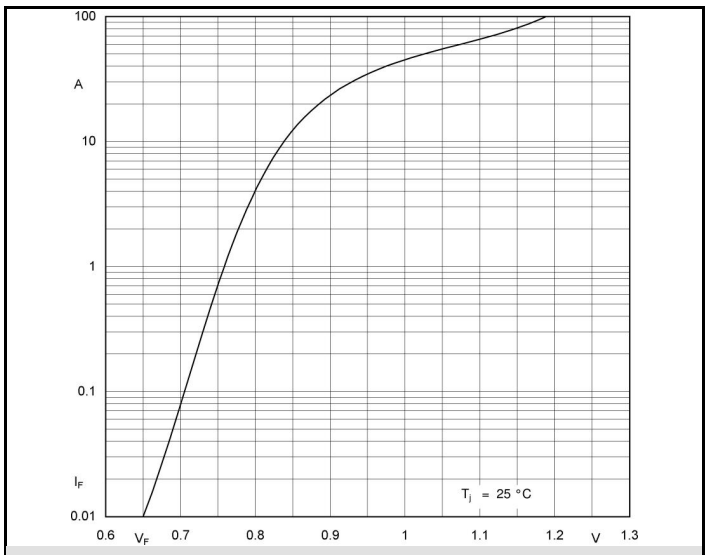


Fig. 1 Forward characteristics (typical values)

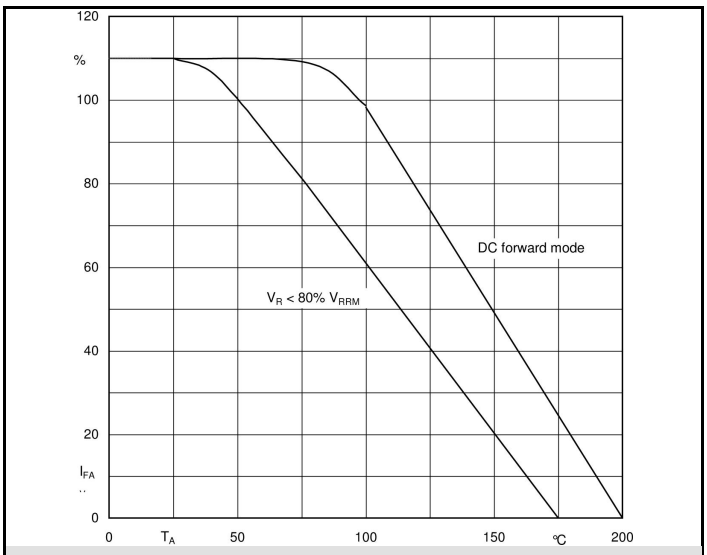


Fig. 2 Rated forward current vs. ambient temperature 1)

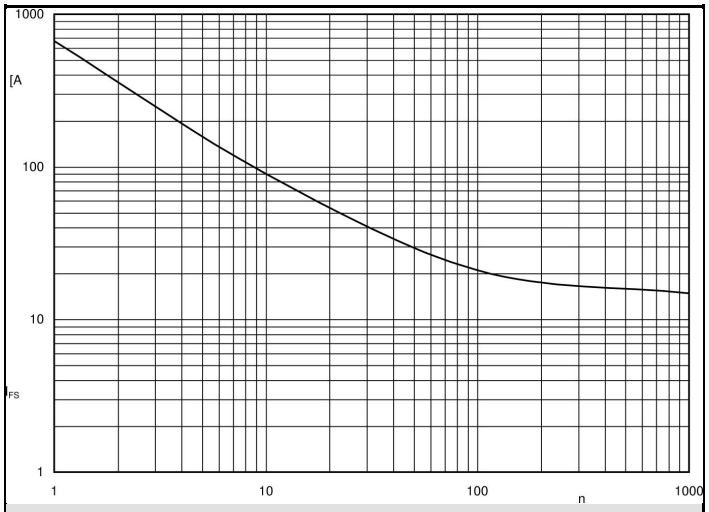


Fig. 4 I_{FSM} current versus number of cycles at 50 Hz

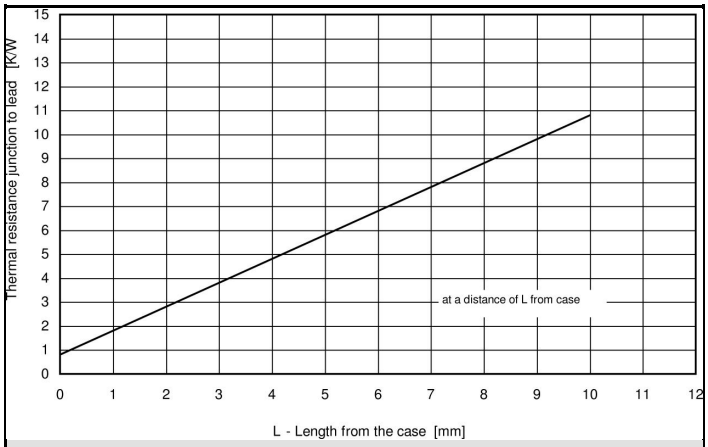


Fig. 4 Thermal resistance versus distance from case

