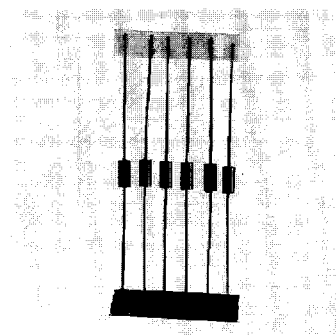


V_{RSM} V_{RRM}	I_{FRMS} (maximum value for continuous operation) 3 A		
	I_{FAV} (sin. 180; $T_{amb} = 45\text{ °C}$; $R_{thja} = 80\text{ °C/W}$) 1,4 A		
V	Types	$C_{max.}$ μF	$R_{min.}$ Ω
50	1 N 4001 G	10000	0,5
100	1 N 4002 G	5000	1
400	1 N 4004 G	1600	4
600	1 N 4005 G	1000	6
800	1 N 4006 G	800	8
1000	1 N 4007 G	660	10

Symbol	Conditions	1 N 400. G
I_{FAV}	$T_{ref} = 130\text{ °C}$; L = 10 mm; sin. 180 sin. 180; $T_{amb} = 75\text{ °C}$; $R_{thja} = 80\text{ °C/W}$	1,3 A 1,1 A
I_{FCL}	$T_{amb} = 75\text{ °C}$; $R_{thja} = 80\text{ °C/W}$	0,9 A
I_{FSM}	$T_{vj} = 25\text{ °C}$ 8,3 ms 10 ms $T_{vj\ max.}$ 8,3 ms 10 ms	39 A 35 A 33 A 30 A
i^2t	$T_{vj} = 25\text{ °C}$ $T_{vj\ max.}$	6,1 A ² s 4,5 A ² s
I_R	$T_{vj} = 25\text{ °C}$; $V_R = V_{RRM}$ $T_{vj} = 150\text{ °C}$; $V_R = V_{RRM}$	4 μA 150 μA
V_F $V_{(TO)}$ r_T C_j	$T_{vj} = 25\text{ °C}$; $I_F = 1\text{ A}$; max. $T_{vj\ max.}$ $T_{vj\ max.}$ $V_R = 0$; f = 1 MHz; typ.	1,1 V 0,85 V 90 m Ω 25 pF
R_{thja} R_{thja} R_{thjr} T_{vj} T_{stg} T_{solder}	p. c. b. 50 x 50 mm L = 10 mm max. 10 s; L $\geq$ 9 mm	— 80 °C/W 30 °C/W - 40...+ 175 °C - 65...+ 175 °C 280 °C
a w	approx.	5 · 9,81 m/s ² 0,5 g
Case		E 32

Rectifier Diodes

1 N 4001 ... 4007 G



Features

- Glass passivated silicon chip
- Void-free moulded plastic acc. to Underwriters Laboratory (UL) flammability classification 94 V-0
- Polarity: Band denotes cathode terminal
- Available with formed leads on request

Typical Applications

- General purpose rectifier diodes for high quality requirement
- For printed circuit board mounting

¹⁾ lead length 10 mm

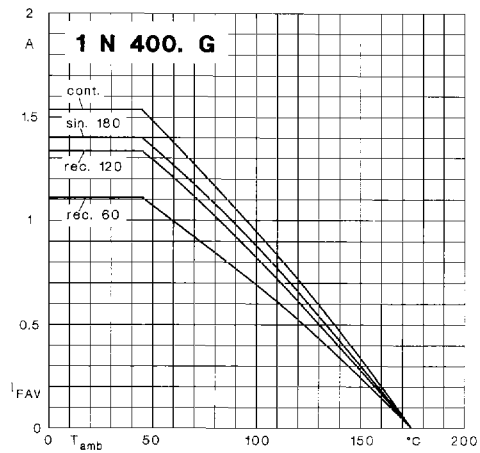


Fig. 4 Rated forward current vs. ambient temperature

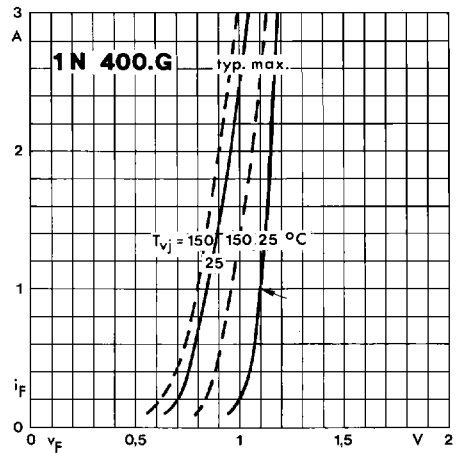


Fig. 6 Forward characteristics

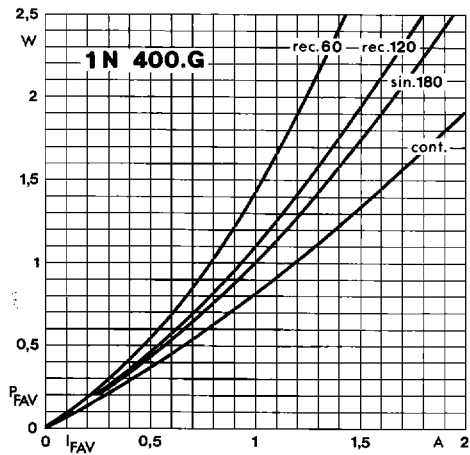


Fig. 8 Power dissipation vs. forward current

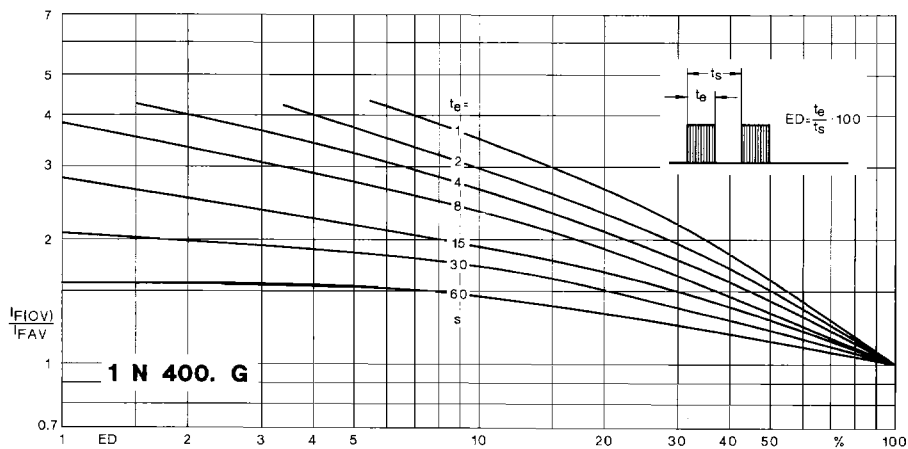


Fig. 9 Rated overload current vs. duty cycle

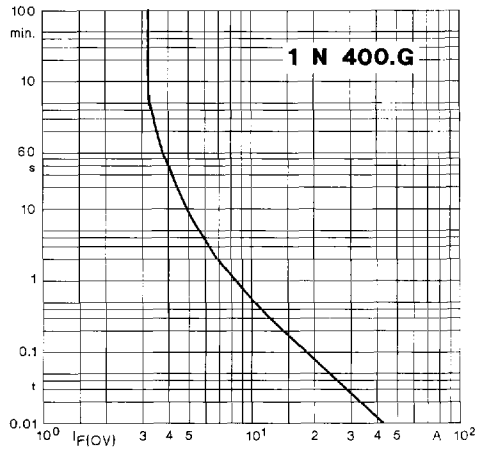


Fig. 10 Rated overload current vs. time

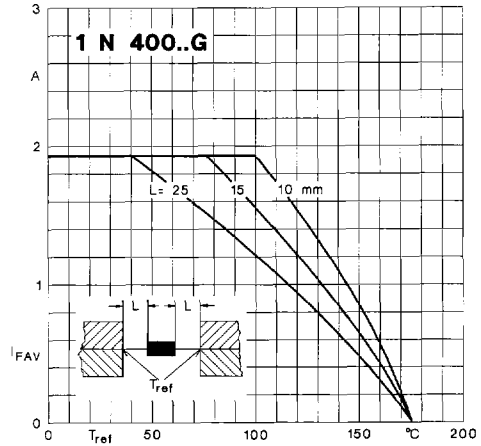


Fig. 14 Rated forward current vs. reference temp.

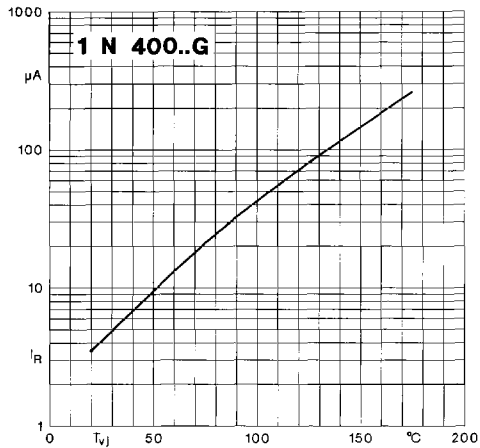


Fig. 15 Reverse current vs. virt. junction temp.

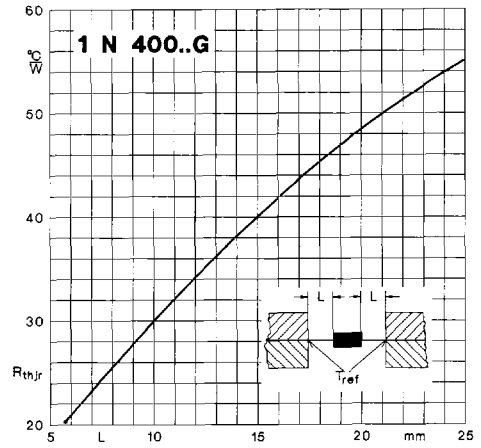
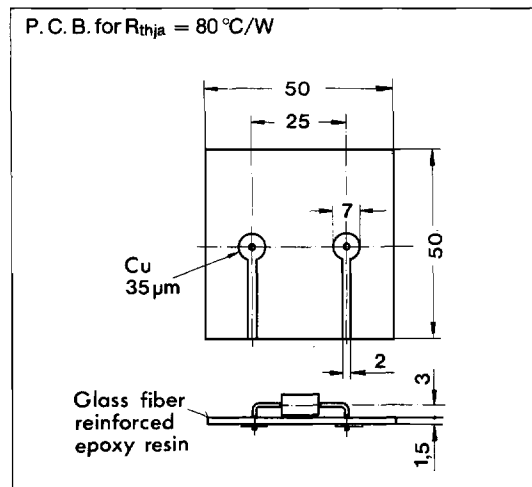
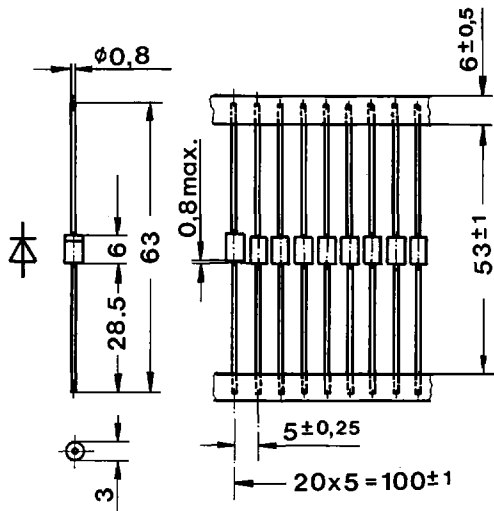


Fig. 16 Thermal resistance vs. lead length



1 N 400. G

Case E 32



5000 diodes per reel

Dimensions in mm

Reel dimensions page B 8 – 2