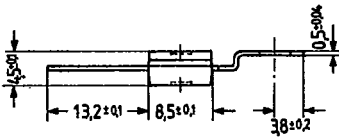
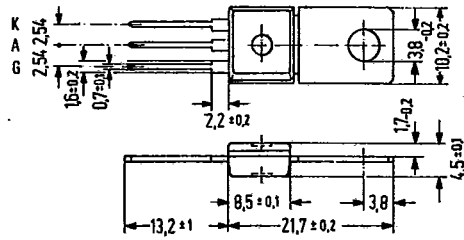


BR 403 is a silicon planar thyristor in a plastic package similar to TO 202. The thyristor is especially suitable for use in switching power supplies as well as for universal applications at low and medium performance.

Type	Ordering code
BR 403	Q62702-R306



Available upon request also with bent fixing plate



Approx. weight 15 g Dimensions in mm

Maximum ratings ($T_j = -40$ to $+125$ °C, $R_{GK} = 1000$ Ω)

Neg. and pos. repetitive peak off-state voltage

V_{RR}/V_{DR} | 30 | V

Max. rms on-state current

$I_{T(rms)}$ | 0.8 | A

Surge on-state current (sinusoidal pulse $t_p < 1$ ms in accordance with DIN 41787)

I_{TSM} | 6 | A

Repetitive peak current ($t_p = 5$ μs, $v \leq 0.1$)

I_{TRM} | 4 | A

Repetitive gate voltage

$V_{(KG)rep}$ | 8 | V

Average gate power dissipation

$P_{G(AV)}$ | 0.1 | W

Peak gate power dissipation

P_{GP} | 2 | W

Storage temperature range

T_{stg} | -55 to +125 | °C

Junction temperature

T_j | 125 | °C

Thermal resistance

Junction to ambient air

R_{thJA} | ≤ 80 | K/W

Junction to case

R_{thJC} | ≤ 30 | K/W

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Static characteristics ($T_G = 25^\circ\text{C}$)

Continuous reverse blocking and off-state current

 $(R_{GK} = 1\text{ k}\Omega)$ $I_R/I_D \leq 2$ μA $(R_{GK} = 1\text{ k}\Omega; T_J = 125^\circ\text{C})$ $I_R/I_D \leq 50$ μA Holding current ($R_{GK} = 1\text{ k}\Omega$) $I_H < 5$ mA Neg gate current ($t_p = 10\text{ }\mu\text{s}$) $-I_G = 0.05$ mA

On-state voltage, pulsed

 $(I_T = 3\text{ A}; t_p = 5\text{ }\mu\text{s})$ $V_T \leq 2.0$ V

Gate trigger current

 $(V_{AK} = 6\text{ V}; R_L = 100\text{ }\Omega)$ $I_{GT} \leq 200$ μA

Gate trigger voltage

 $(V_{AK} = 6\text{ V}; R_L = 100\text{ }\Omega; R_{GK} = 1\text{ k}\Omega)$ $V_{GT} \leq 0.8$ V

Gate non-trigger forward voltage

 $(V_D = V_{DR}; R_{GK} = 1\text{ k}\Omega)$ $V_{GF} \geq 0.1$ V

Critical rate of voltage rise

 $(R_{GK} = 1\text{ k}\Omega; V_{AK} = 20\text{ V})$ $dv/dt = 20$ $\text{V}/\mu\text{s}$

Turn-off time

 $(I_{TS(\text{rectangular})} = 0.8\text{ A}; t_p = 50\text{ }\mu\text{s};$ $V_R = 20\text{ V}; V_{AK} = V_{DR}; dv/dt = 20\text{ V}/\mu\text{s})$ $t_q \leq 13$ μs

Turn-on time

 $(V_D = V_{DR}; R_L = 100\text{ }\Omega; R_{GK} = 1\text{ k}\Omega)$ $I_{GTS} = 1.4\text{ mA}; t_p = 5\text{ }\mu\text{s}; t_r = 40\text{ ns})$ $t_{on} = 1.2$ μs