

25C D ■ 上海5800供应商 0004759 7 ■ SIEG

捷多邦, 专业PCB打样工厂, 24小时加急出货

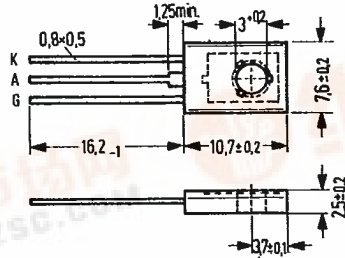
Silicon Miniature Thyristor

BR 303

SIEMENS AKTIENGESELLSCHAFT 9 D T-25-11

BR 303 is a silicon planar thyristor in a TO-126 plastic package (12 A 3 DIN 41 869, sheet 4). 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 303	Q68000-A3436



Maximum ratings ($T_j = -40^\circ\text{C}$ to $+125^\circ\text{C}$, $R_{GK} = 1000 \Omega$)

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 $t_r < 1$ ms in accordance with DIN 41 787)	I_{TSM}	6	A
Repetitive peak current ($t_p = 5 \mu\text{s}$, $v \leq 0.1$)	I_{TRM}	4	A
Repetitive gate voltage	$V_{(KG)rep}$	8	V
Storage temperature range	T_{stg}	-55 to $+125$	$^\circ\text{C}$
Junction temperature	T_j	125	$^\circ\text{C}$
Average gate power dissipation	$P_{G(AV)}$	0.1	W
Peak gate power dissipation	P_{GP}	2	W

Thermal resistance

Junction to ambient air	R_{thJA}	≤ 125	K/W
Junction to case	R_{thJC}	≤ 25	K/W

2136

F-03

805



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Static characteristics ($T_{case} = 25^\circ C$)

Continuous reverse blocking and off-state current

($R_{GK} = 1\text{ k}\Omega$)	I_R/I_D	≤ 2	μA
($R_{GK} = 1\text{ k}\Omega; T_J = 125^\circ C$)	I_R/I_D	≤ 50	μA
Holding current ($R_{GK} = 1\text{ k}\Omega$)	I_H	< 5	mA
Neg. gate current ($t_p = 10\text{ }\mu s$)	$-I_G$	0.05	mA
On-state voltage, pulsed ($I_T = 3\text{ A}; t_p = 5\text{ }\mu s$)	V_T	≤ 2.0	V
Gate trigger current ($V_{AK} = 6\text{ V}; R_L = 100\text{ }\Omega$)	I_{GT}	≤ 200	μA
Gate trigger voltage ($V_{AK} = 6\text{ V}; R_L = 100\text{ }\Omega; R_{GK} = 1\text{ }\Omega$)	V_{GT}	≤ 0.8	V
Gate non-trigger forward voltage ($V_D = V_{DR}; R_{GK} = 1\text{ k}\Omega$)	V_{GF}	≥ 0.1	V
Critical rate of voltage rise ($R_{GK} = 1\text{ k}\Omega; V_{AK} = 20\text{ V}$)	dv/dt	20	V/ μs
Turn-off time ($I_{TS(\text{rectangular})} = 0.8\text{ A}; t_p = 50\text{ }\mu s$; $V_R = 20\text{ V}; V_{AK} = V_{DR}; dv/dt = 20\text{ V}/\mu s$)	t_q	≤ 13	μs
Turn-on time ($V_D = V_{DR}; R_L = 100\text{ }\Omega; R_{GK} = 1\text{ k}\Omega$; $I_{GTS} = 1.4\text{ mA}; t_p = 5\text{ }\mu s; t_r = 40\text{ ns}$)	t_{on}	1.2	μs