Ordering number:EN819D

SANYO

DRA5

Silicon Diffused Junction Type

5.0A Reverse Blocking Thyristor

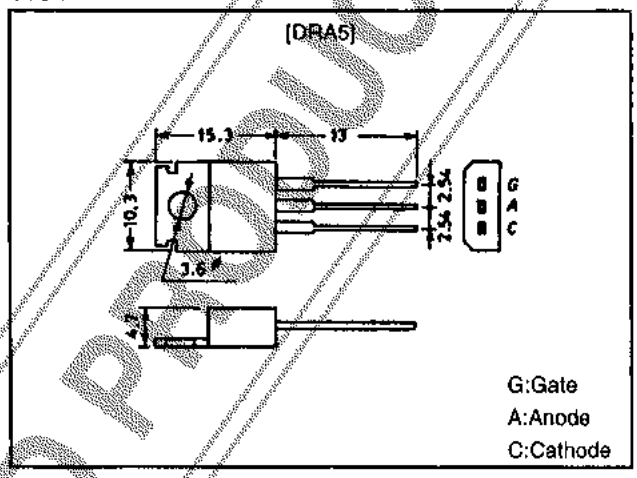
Features

- Glass passivation for high reliability.
- Peak OFF-state (reverse) voltage : 100 to 600V.
- Average ON-state current : 5A.
- TO-220 package.
- Weight : 2g.

Package Dimensions

unit:mm

1104



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	DRA5B	DRA5C	DRA5E	DRA5G	Unit
Repetitive Peak OFF-State Voltage	V_{DRM}		100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}		150	300	500	700	V
Repetitive Peak Reverse Voltage	V_{RRM}		100	200	400	600	V
Average ON-State Current	$I_{T(AV)}$	Tc=91°C, single-phase half-wave	→	→	→	5	A
RMS ON-State Current	$I_{T(RMS)}$		→	→	→	7.8	A
Surge ON-State Current	I_{TSM}	Sine half-wave 1 cycle, 50Hz				80	A
Amperes Squared-Seconds	$\int i^2 T \cdot dt$		→	→	→	32	A^2S
Peak Gate Power Dissipation	P_{GM}		→	→	→	5	W
Average Gate Power Dissipation	$P_{G(AV)}$		→	→	→	0.5	W
Peak Gate Forward Current	I_{FGM}		→	→	→	2	A
Peak Gate Forward Voltage	V_{FGM}					10	V
Peak Gate Reverse Votage	V_{RGM}		→	→	→	5	V
Junction Temperature	Tj		→	→	→	125	°C
Storage Temperature	Tstg		→	→	→	−40 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Repetitive Peak OFF-State Current	I_{DRM}	Tj=125°C, $V_D=V_{DRM}$			2	mA
Repetitive Peak Reverse Current	I_{RRM}	Tj=125°C, $V_R=V_{RRM}$			2	mA
ON-State Voltage	V_T	I_T=10A			1.6	V
Critical Rate of Rise of OFF-State Voltage	dv/dt	Tj=125°C, $V_D=2/3V_{DRM}$	30			V/μs
Holding Current	I_H	R_L=100Ω			60	mA
Gate Trigger Current	I_{GT}	V_D=6V, R_L=10Ω			40	mA
Gate Trigger Voltage	V_{GT}	V_D=6V, R_L=10Ω			1.5	V
Gate Nontrigger Voltage	V_{GD}	Tc=125°C, $V_D=2/3V_{DRM}$	0.2			V
Thermal Resistance	Rth(j-c)				3	°C/W

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