

SANYO

No.1873A

DRD3

Silicon Diffused Junction Type

3.0A Reverse Blocking Thyristor**Features**

- Glass passivation for high reliability
- Peak OFF-state (reverse) voltage : -100 to -600V
- Average ON-state current : 3A
- TO220 package

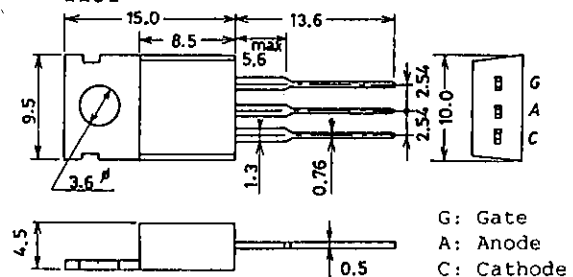
Absolute Maximum Ratings at Ta = 25°C			DRD3B	DRD3C	DRD3E	DRD3G	unit
Repetitive Peak OFF-State Voltage	V _{DRM}	R _{GK} = 1kΩ	100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V _{RSM}	R _{GK} = 1kΩ	-150	-300	-500	-720	V
Repetitive Peak Reverse Voltage	V _{RRM}	R _{GK} = 1kΩ	-100	-200	-400	-600	V
Average ON-State Current	I _{T(AV)}	Ta = 30°C, single-phase half-wave	→	→	→	3	A
RMS ON-State Current	I _{T(RMS)}		→	→	→	4.5	A
Surge ON-State Current	I _{TSM}	Sine half-wave 1 cycle, 50Hz	→	→	→	60	A
Amperes Squared-Seconds	f _i ² T·dt	1ms ≤ t ≤ 10ms	→	→	→	18	A ² s
Peak Gate Power Dissipation	P _{GM}	f ≥ 50Hz, duty ≤ 10%	→	→	→	5	W
Average Gate Power Dissipation	P _{G(AV)}		→	→	→	0.5	W
Peak Gate Forward Current	I _{FGM}	f ≥ 50Hz, duty ≤ 10%	→	→	→	3	A
Peak Gate Reverse Voltage	V _{RGM}		→	→	→	-5	V
Junction Temperature	T _j		→	→	→	110	°C
Storage Temperature	T _{stg}		→	→	→	-40 to +110	°C
Weight			→	→	→	2	g

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Repetitive Peak OFF-State Current	I _{DRM}	T _j = 110°C, V _D = V _{DRM} , R _{GK} = 1kΩ			0.5	mA
Repetitive Peak Reverse Current	I _{RRM}	T _j = 110°C, V _R = V _{RRM} , R _{GK} = 1kΩ			-0.5	mA
Peak ON-State Voltage	V _{TM}	I _{TM} = 12A			1.6	V
Critical Rate of Rise of OFF-State Voltage	dv/dt	T _j = 110°C, V _D = V _{DRM} , R _{GK} = 1kΩ	100			V/s
Holding Current	I _H	R _L = 100Ω, R _{GK} = 1kΩ		60		mA
Gate Trigger Current	I _{GT}	V _D = 6V, R _L = 100Ω, R _{GK} = 1kΩ			15	mA
Gate Trigger Voltage	V _{GT}	V _D = 6V, R _L = 100Ω, R _{GK} = 1kΩ			1.5	V
Gate Nontrigger Voltage	V _{GD}	Ta = 110°C, V _D = V _{DRM} , R _{GK} = 1kΩ	0.2			V
Thermal Resistance	R _{th(j-c)}				3.2	°C/W

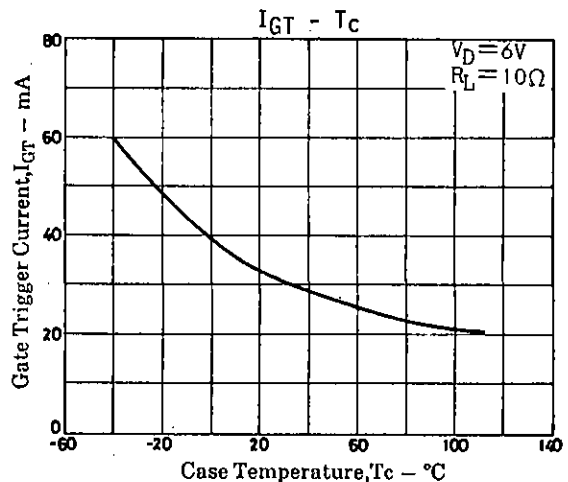
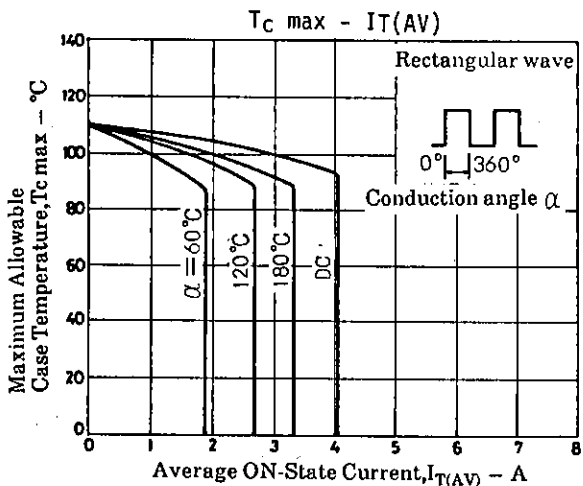
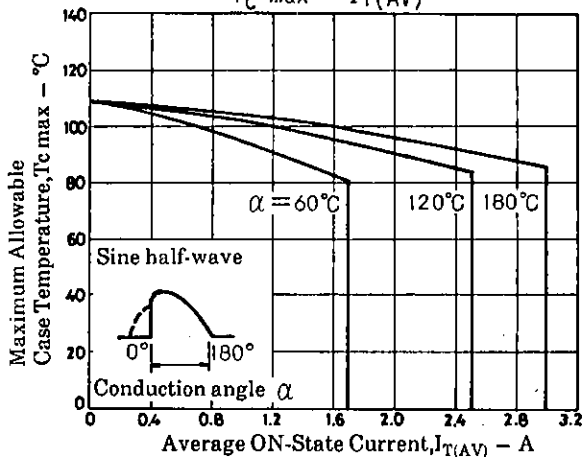
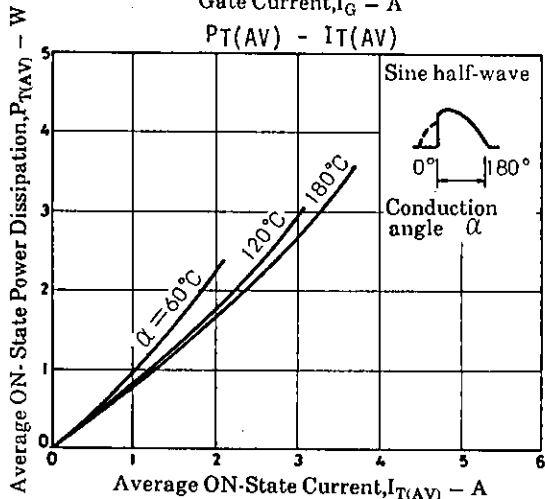
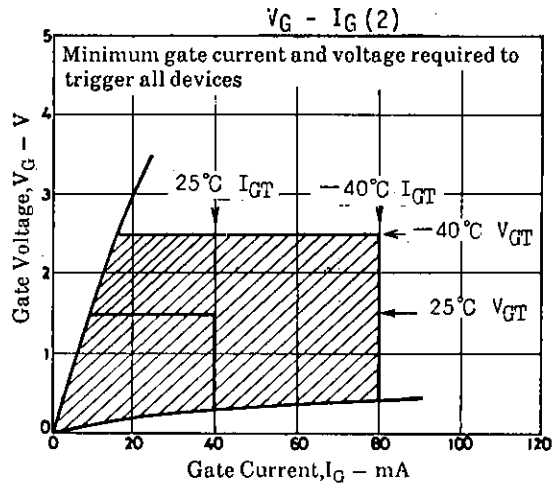
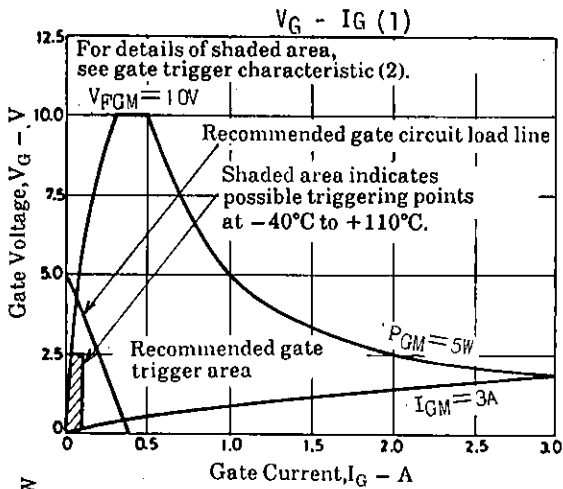
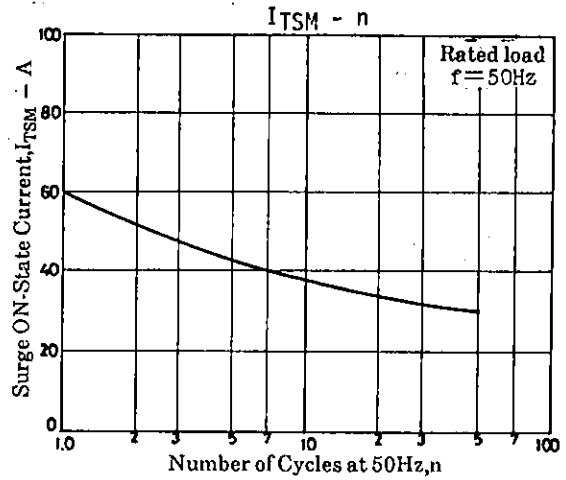
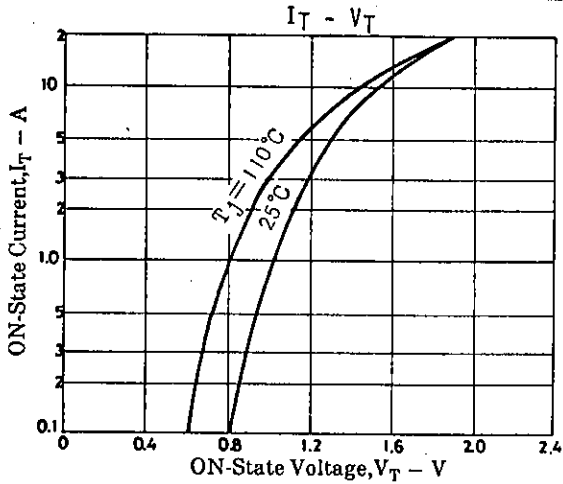
Package Dimensions 1151

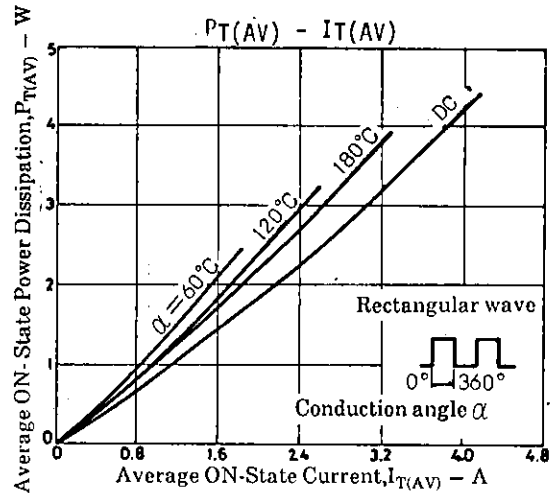
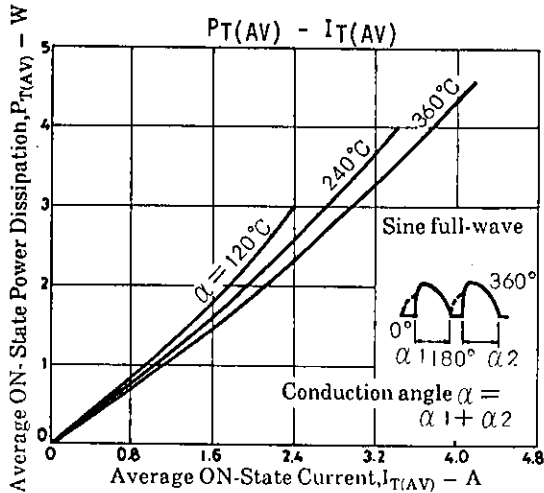
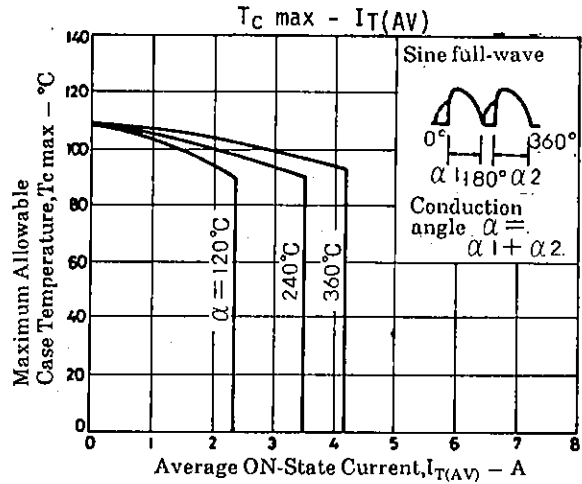
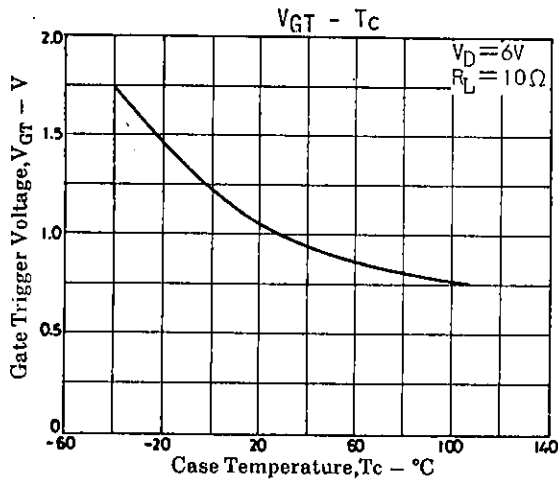
(unit: mm)



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