

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

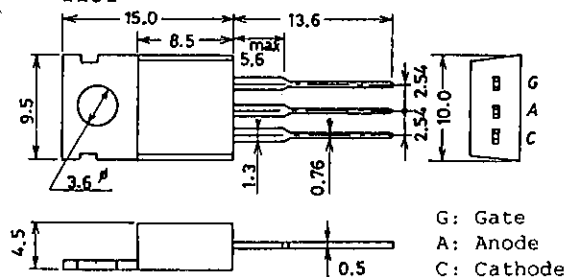
			DRD3B	DRD3C	DRD3E	DRD3G	unit
Repetitive Peak OFF-State Voltage	V_{DRM}	$R_{GK} = 1k\Omega$	100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$R_{GK} = 1k\Omega$	-150	-300	-500	-720	V
Repetitive Peak Reverse Voltage	V_{RRM}	$R_{GK} = 1k\Omega$	-100	-200	-400	-600	V
Average ON-State Current	$I_{T(AV)}$	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	$f_i^2 T \cdot dt$	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

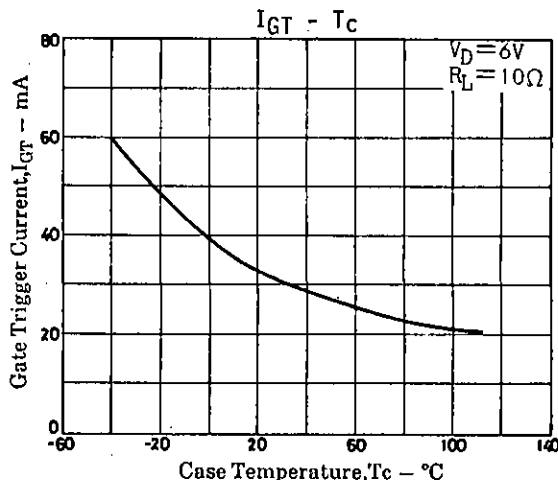
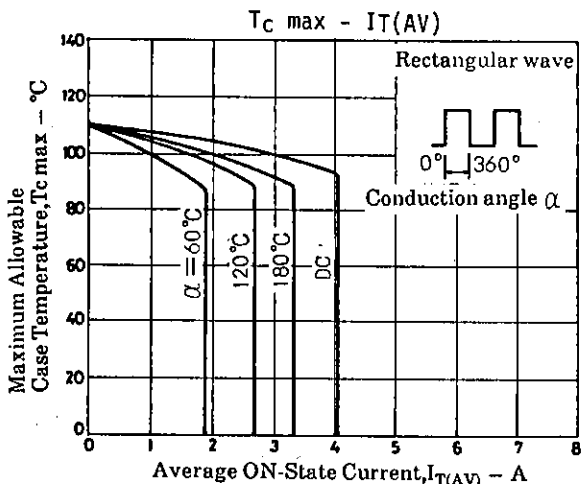
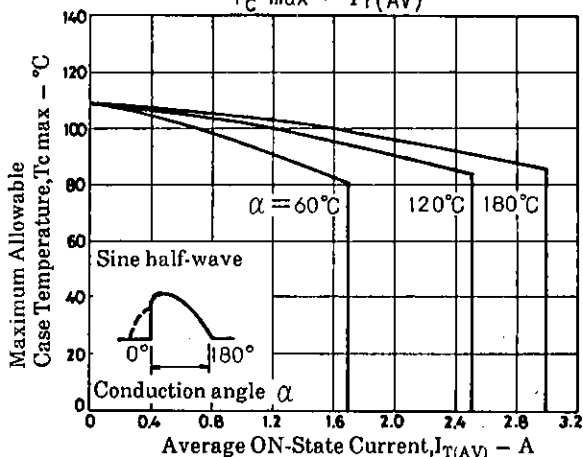
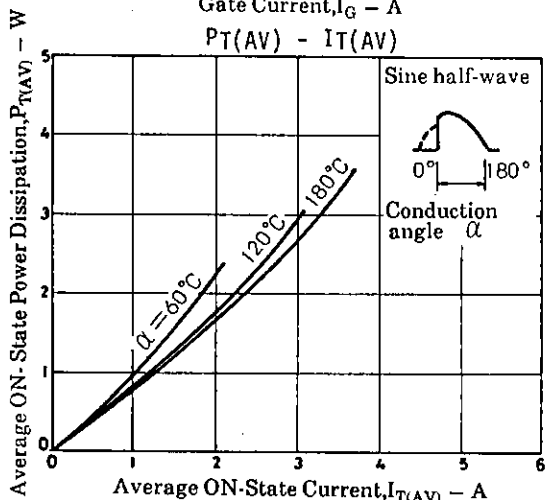
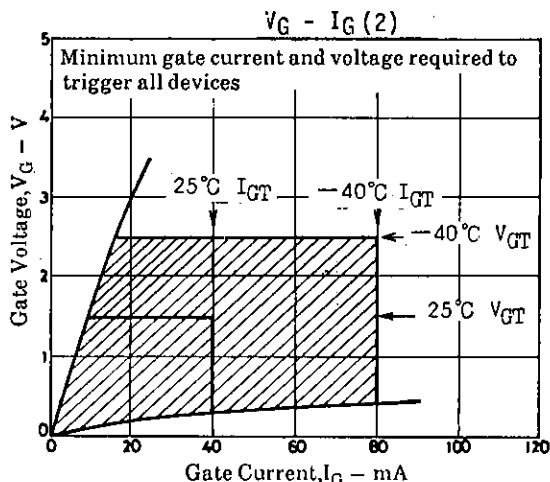
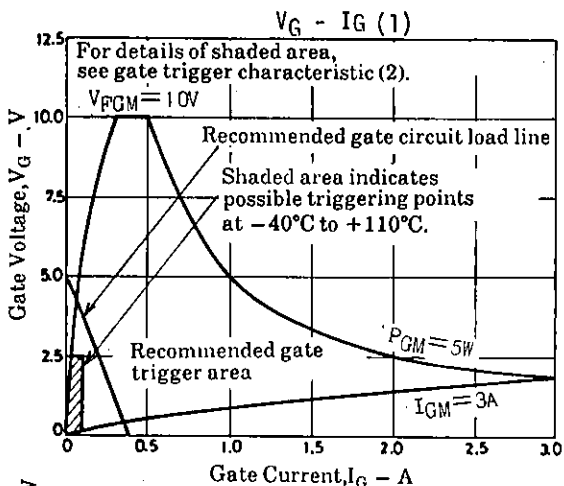
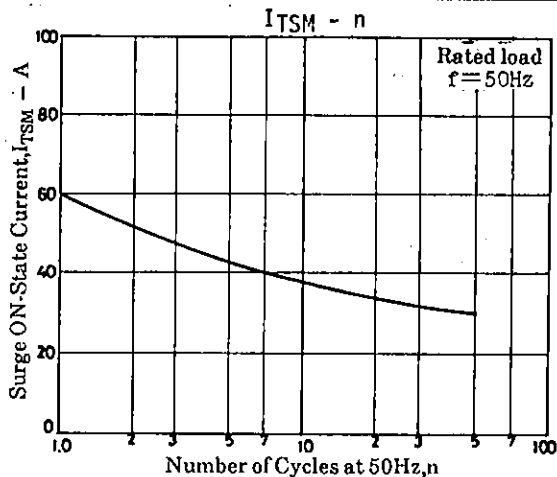
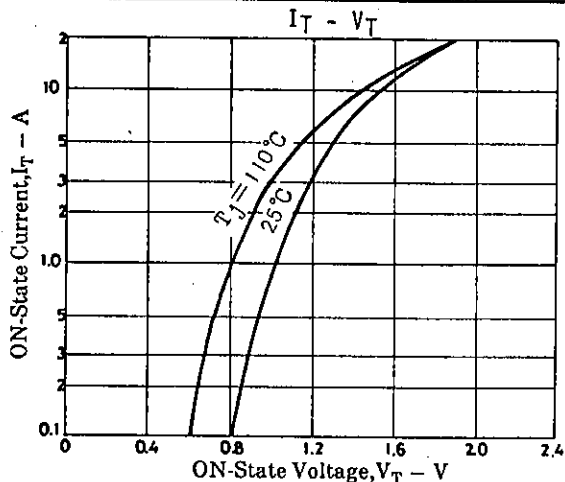
Electrical Characteristics at Ta = 25°C

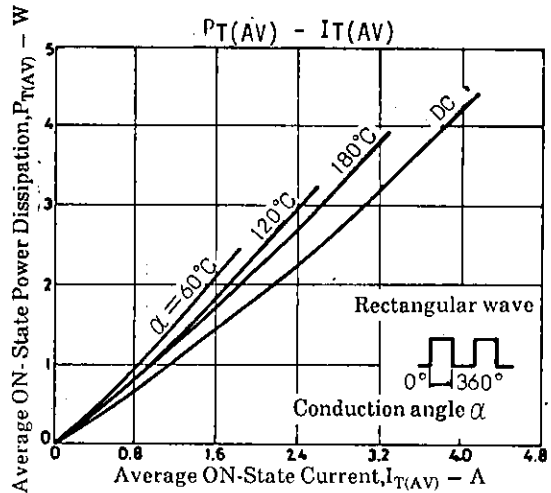
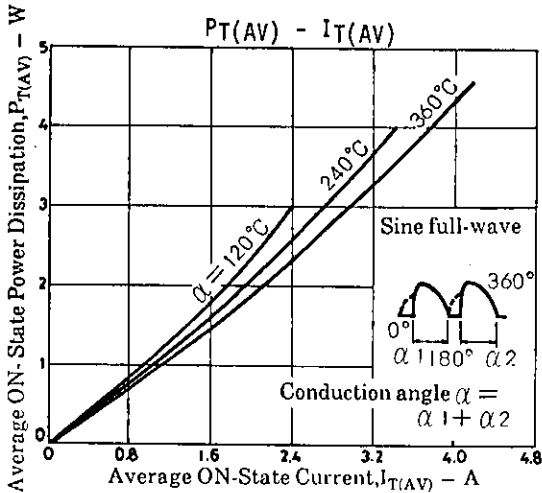
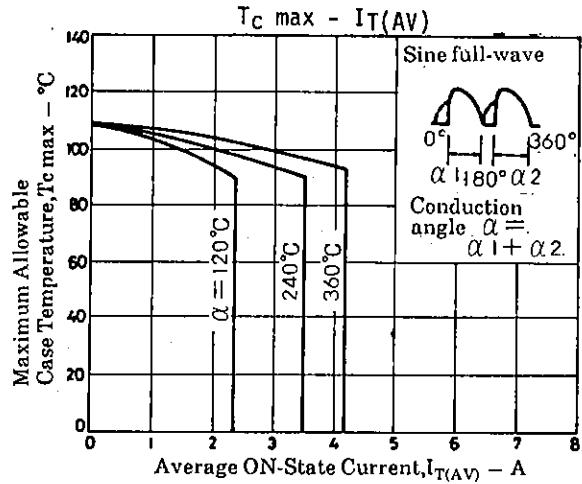
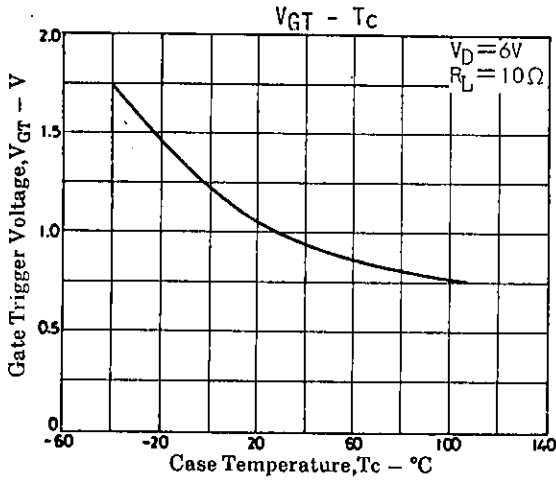
			min	typ	max	unit
Repetitive Peak OFF-State Current	I_{DRM}	$T_j = 110^\circ C, V_D = V_{DRM}, R_{GK} = 1k\Omega$			0.5	mA
Repetitive Peak Reverse Current	I_{RRM}	$T_j = 110^\circ C, V_R = V_{RRM}, R_{GK} = 1k\Omega$			-0.5	mA
Peak ON-State Voltage	V_{TM}	$I_{TM} = 12A$			1.6	V
Critical Rate of Rise of OFF-State Voltage	dv/dt	$T_j = 110^\circ C, V_D = V_{DRM}, R_{GK} = 1k\Omega$	100			V/s
Holding Current	I_H	$R_L = 100\Omega, R_{GK} = 1k\Omega$		60		mA
Gate Trigger Current	I_{GT}	$V_D = 6V, R_L = 100\Omega, R_{GK} = 1k\Omega$			15	mA
Gate Trigger Voltage	V_{GT}	$V_D = 6V, R_L = 100\Omega, R_{GK} = 1k\Omega$			1.5	V
Gate Nontrigger Voltage	V_{GD}	$T_a = 110^\circ C, V_D = V_{DRM}, R_{GK} = 1k\Omega$	0.2			V
Thermal Resistance	$R_{th(j-c)}$				3.2	°C/W

Package Dimensions 1151

(unit: mm)







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