

GATE CONTROLLED DEVICE - Gate Turn Off Thyristors - Capsule Type

Old Part Number	PDF Data Sheet Available	New Part Number	V_{DRM}	$V_{GK} = 2V$	V_{RRM}	V_{RGM}	$I_{TGQM} @ C_s$		$I_{T(AV)}$ $T_{SINK} = 55^{\circ}C$	$I_{T(RMS)}$ $T_{SINK} = 25^{\circ}C$	$I_{TSM(1)}$ 10ms	$I_{TSM(2)}$ 2ms	I^2t	V_{TM} $I_T = I_{TGQM}$	$I_{GT} @ 25^{\circ}C$	$V_{GT} @ 25^{\circ}C$ (Typ)	$t_{gt} @ I_{GM} = I_{TGQM}$		I_T	$t_{gq} @ \frac{di_{GQ}}{dt}$ $I_T = I_{TGQM}$		t_{on} (min)	t_{off} (min)	Rth j-hs	Wt	Mounting Force	Outline No.
			(V)	(V)	(V)	(A)	(mF)	(A)	(A)	(kA)	(kA)	(kA ² s)	(V)	(A)	(V)	(mS)	(A)	(ms)	(A/ms)	(mS)	(mS)	(K/W)	(g)	(kN)			
			Notes 1&2	Note 2	Note 2			Note 3	Note 3	Note 4	Note 4	Note 4	Note 5	Note 6	Note 6	Note 7	Note 8										
WG5025Rx	*	S0500KC250	1200-2500		100-2000	18	500	1	330	640	4	7.2	80×10^3	2.5	1.0	0.8	0.4	10	I_T	10	20	20.0	90.0	0.065	120	45-90	101A296
WG6018Rx	*	S0600KC180	600-1800		100-1400	18	600	1.5	430	870	5	9	130×10^3	2.1	1.0	0.8	0.4	12	10	20	20.0	70.0	0.063	120	45-90		
WG9014Rx	*	S0900KC140	600-1400		100-1100	18	900	3	445	890	5.5	9.8	150×10^3	2.3	1.0	0.8	0.4	15	12	20	20.0	75.0	0.063	120	45-90		
WG5025FRx	*	H0500KC250	1200-2500		100-2000	18	500	1	280	540	3	5.4	45×10^3	3.2	1.5	0.8	0.8	30	5	40	10.0	60.0	0.065	120	45-90		
WG6018FRx	*	H0600KC180	600-1800		100-1400	18	600	1.5	360	700	4	7.2	80×10^3	2.6	1.5	0.8	0.8	30	5	40	20.0	45.0	0.063	120	45-90		
WG9014FRx	*	H0900KC140	600-1400		100-1100	18	900	3	370	730	4.5	8.1	100×10^3	3.0	1.5	0.8	0.8	40	6	40	10.0	50.0	0.063	120	45-90		
WG10025SN	Y	G1000LC250	2500		1800	18	1000	2	500	970	5	8.9	125×10^3	2.5	1.0	1.0	2.0	20	16	25	2.0	16.0	0.080	170	10-12	101A288	
WG10045SN	Y	G1000NC450	4500		1800	18	1000	2	380	750	8	14	80×10^3	4.0	1.0	1.2	2.0	20	16	25	2.0	16.0	0.080	480	15-25	Fig. 3	
WG20025SN	Y	G2000LC250	2500		1800	18	2000	4	1020	2040	16	24	1.28×10^6	2.8	2.5	1.0	5.0	30	24	30	5.0	24.0	0.027	800	17-24	Fig. 4	
WG20045SN	Y	G2000NC450	4500		1800	18	2000	4	870	1730	13	22	0.85×10^6	3.5	2.5	1.0	8.0	30	25	30	8.0	25.0	0.027	800	17-24		
WG30025SN	Y	G3000ZC250	2500		1800	18	3000	5	1640	3270	30	40	4.50×10^6	2.5	4.0	1.2	7.5	30	28	40	7.5	28.0	0.015	1500	36-44	Fig. 5	
WG30045SN	Y	G3000ZC450	4500		1800	18	3000	6	1180	2360	24	32	2.88×10^6	4.0	3.0	1.0	9.0	30	28	40	9.0	28.0	0.015	1300	36-44		
WG30060SN	Y	G3000ZC600	6000		1800	18	3000	3	1100	2300	24	32	2.88×10^6	3.5	1.0	1.2	7.5	25	28	70	7.5	28.0	0.015	1500	36-44	Fig. 6	
WG40045SN	Y	G4000EC450	4500		1800	18	4000	6	1270	2540	25	32	3.1×10^6	4.4	4.0	1.2	7.5	50	28	40	7.5	28.0	0.015	1500	36-44		

The information contained herein is confidential and is protected by Copyright. The information may not be used or disclosed except with the written permission of and in the manner permitted by the proprietors Westcode Semiconductors Limited. In the interest of product improvement, Westcode reserves the right to change specifications at any time without prior notice.

* These products, and their derivatives now undergoing obsolescence - please contact Factory for alternatives.

Part Number OBSOLETE	Data Sheet Available	New Part Number (Not applicable)	V_{DRM} $V_{GK} = 2V$ (V) Note 1	V_{RRM} (V) Note 1	V_{GK} (V) Note 2	$I_{TGQM} @ C_s$ (A) (mF)	$I_{T(AV)}$ $T_{SINK} = 55^{\circ}C$ (A) Note 3	$I_{T(RMS)}$ $T_{CASE} = 25^{\circ}C$ (A) Note 3	$I_{TSM(1)}$ 10ms (kA) Note 4	$I_{TSM(2)}$ 2ms (kA) Note 4	I^2t (A ² s) Note 4	V_{TM} $I_T = I_{TGQM}$ (V) Note 5	$I_{GT} @ 25^{\circ}C$ (A)	$V_{GT} @ 25^{\circ}C$ (Typ) (V)	$t_{gt} @ I_{GM} = I_{TGQM}$ (ms) (A) Note 6	I_T (A)	$t_{gq} @ di_{GQ}/dt$ $I_T = I_{TGQM}$ (ms) (A/ms) Note 6	t_{on} (min) Note 7	t_{off} (min) Note 8	Rth j-hs (K/W)	Wt (g)	Mounting Force (kN)	Outline No.
WG5045S	N/A	N/A	Not for new designs. Please refer to Factory for assistance.																				
WG8045S	N/A	N/A																					
WG8060S	N/A	N/A																					
WG7025S	N/A	N/A																					
WG10025S	N/A	N/A																					
WG40045S	N/A	N/A																					

The information contained herein is confidential and is protected by Copyright. The information may not be used or disclosed except with the written permission of and in the manner permitted by the proprietors Westcode Semiconductors Limited. In the interest of product improvement, Westcode reserves the right to change specifications at any time without prior notice.

- Notes:
- 1

$V_{GK} \leq -2V$.
- 2

Not applicable to this table.
- 3

Double side cooled, single phase; 50Hz, 180° sinewave.
- 4

$T_{j(initial)} = 125^{\circ}C$, single phase, 180° sinewave, re-applied voltage $V_D = V_R \leq 10V$.
- 5

$I_T = 3000A$ repetitive, $I_{GM} = 30A$, $di_{GM}/dt = 20A/\mu s$, for higher di/dt please consult Westcode Sales Office.
- 6

With RCD snubber, $R = 5$ ohms and C is the value as for I_{TGQM}
- 7

Does not include snubber discharge time; refers only to minimum time for whole device to be in conduction with anode current $di/dt > 10A/\mu s$
- 8

Minimum time to re-fire the device. The gate drive circuit may require a longer period of low impedance option to ensure full extraction of the tail current