



### Asymmetric GTOs

Part number	$V_{DRM}$	$V_{DC}$	$V_{RRM}$	$I_{TGQM}$ at $C_S$		$I_{TAVM}$	$I_{TSM}$	$V_T$	$V_{T0}$	$r_T$	$T_{VJM}$	$R_{thJC}$	$R_{thCH}$	$F_m$	Housing
						$T_C=85^\circ C$	10ms	$I_{TGQM}$	$T_{VJM}$						
						A	$\mu F$								
5SGA 15F2502	2500	1400	17	1500	3	570	10.0	2.80	1.45	0.90	125	27	8	15	F1
5SGA 20H2501	2500	1400	17	2000	4	830	16.0	2.80	1.66	0.57	125	17	5	20	H1
5SGA 25H2501	2500	1400	17	2500	6	830	16.0	3.10	1.66	0.57	125	17	5	20	H1
5SGA 30J2501	2500	1400	17	3000	5	1300	30.0	2.50	1.50	0.33	125	12	3	40	J
5SGA 06D4502	4500	2800	17	600	1	210	3.0	4.00	1.90	3.50	125	50	8	11	D1
5SGA 20H4502	4500	2200	17	2000	4	710	13.0	3.50	1.80	0.85	125	17	5	20	H1
5SGA 30J4502	4500	2800	17	3000	6	930	24.0	4.00	2.20	0.60	125	12	3	40	J
5SGA 40L4501	4500	2800	17	4000	6	1000	25.0	4.40	2.10	0.58	125	11	3	40	L

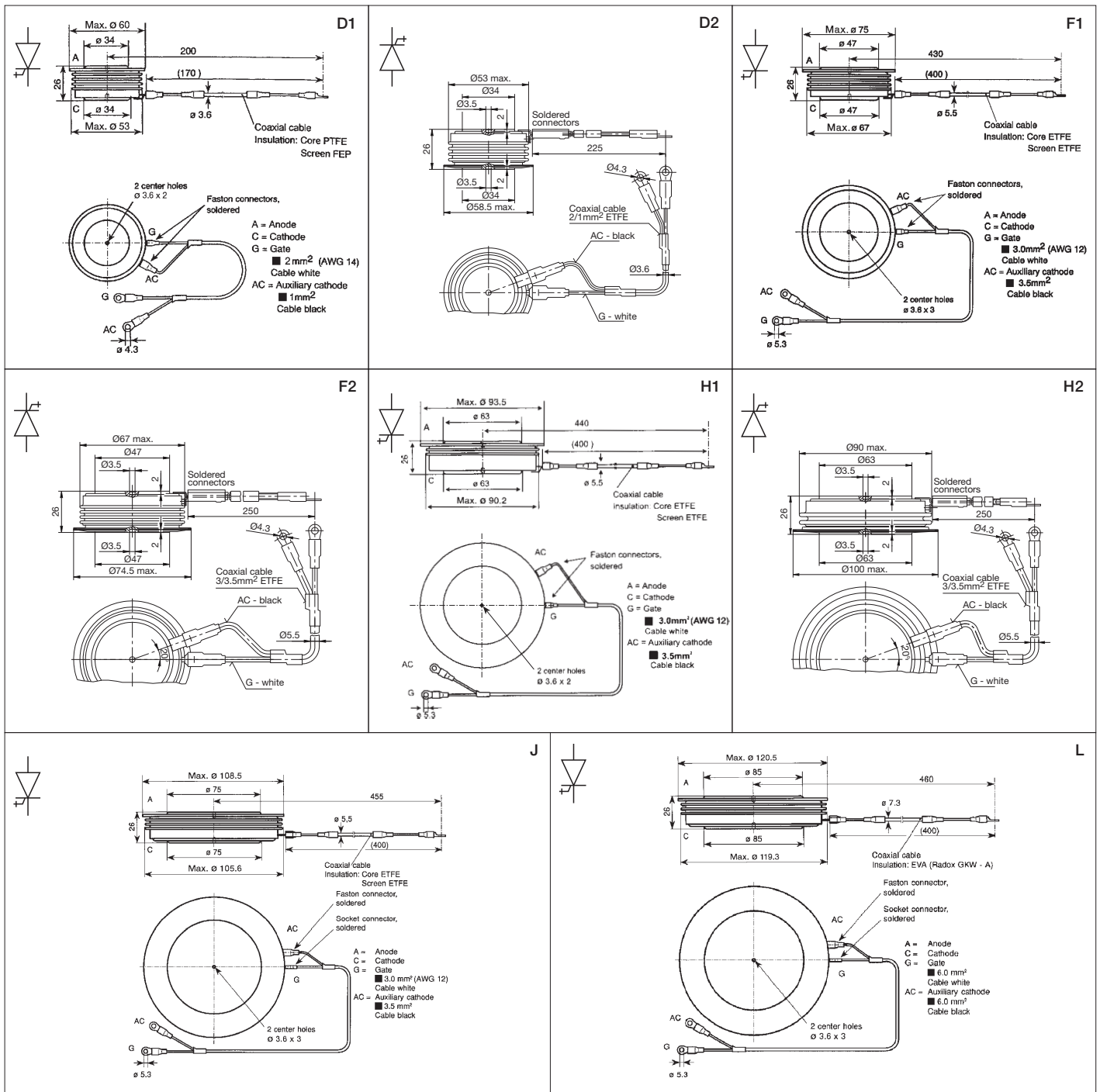
### Asymmetric fine pattern GTOs with buffer layer

5SGF 30J4502	4500	3000	17	3000	3	960	24.0	3.90	1.80	0.70	125	12	3	33	J
5SGF 40L4502	4500	2800	17	4000	6	1180	25.0	3.80	1.20	0.65	125	11	3	40	L

### Symmetric GTOs

Part number	$V_{DRM}, V_{RRM}$		$I_{TGQM}$ at $C_S$		$I_{TAVM}$	$I_{TSM}$	$V_T$	$V_{T0}$	$r_T$	$T_{VJM}$	$R_{thJC}$	$R_{thCH}$	$F_m$	Housing
					$T_C=70^\circ C$	10ms	$I_{TGQM}$	$T_{VJM}$						
					A	$\mu F$								
5SGS 08D2500	2500		800	2	395	4.5	3.20	1.63	1.90	125	40.0	12.0	5	D2
5SGS 12F2500	2500		1200	3	630	10.0	3.20	1.49	1.38	125	24.0	8.0	10	F2
5SGS 16H2500	2500		1600	4	760	14.0	3.78	1.81	1.18	125	18.0	6.0	15	H2
5SGS 08D4500	4500		800	2	285	4.0	4.33	1.77	3.10	115	40.0	12.0	5	D2
5SGS 12F4500	4500		1200	3	442	7.6	4.50	2.28	1.79	115	24.0	8.0	10	F2
5SGS 16H4500	4500		1600	4	600	12.0	4.45	2.30	1.30	115	18.0	6.0	15	H2

Please refer to page 73 for part numbering structure.



Dimensions in mm

### Fast recovery diode recommendation

For all GTO types, ABB offers matching free-wheeling and snubber diodes.

The actual choice of the diode depends on the specific application. Please see application note 5SYA 2064, Applying fast recovery diodes, on [www.abb.com/semiconductors](http://www.abb.com/semiconductors).