

POWER MODULES - DIODE / DIODE

Type No.	I _{F(AV)}	@T _C	V _{RRM} RANGE	I _{FSM}	V _{FM}	@I _{FM}	V _O	r	R _{th} JC	R _{th} CS	T _j Max	Ref.Fig.
				10ms			T _i = T _j max					
	A	°C	V	A	V	A	V	mΩ	°C/W	°C/W	°C	
IRK-41	40	85	400 to 1600	850	1.65	126	0.88	5.90	0.230	0.100	135	1
IRK-56	55	100	400 to 1600	1600	1.35	173	0.71	3.76	0.325	0.100	135	1
IRK-71	70	100	400 to 1600	1790	1.30	220	0.61	2.80	0.285	0.100	135	1
IRK-91	90	100	400 to 1600	2020	1.30	283	0.66	1.81	0.220	0.100	135	1
IRK-105	105	87	400 to 1600	2020	1.34	330	0.66	1.81	0.220	0.100	135	1
IRK-166	165	100	400 to 1600	4000	1.57	518	0.70	1.69	0.200	0.035	135	2
IRK-196	195	100	400 to 1600	4750	1.32	612	0.75	0.92	0.200	0.035	135	2
IRK-236	230	100	400 to 1600	6540	1.26	722	0.79	0.64	0.170	0.035	135	2
IRK-250	250	100	400 to 1600	7015	1.29	785	0.79	0.63	0.160	0.020	135	3
IRK-270	270	100	400 to 1600	8920	1.48	848	0.74	0.94	0.125	0.020	135	3
IRK-320	320	100	400 to 1600	10110	1.28	1005	0.69	0.59	0.125	0.020	135	3
IRK-350	350	100	400 to 1600	10110	1.25	1100	0.69	0.59	0.125	0.035	135	3
IRK-570	570	100	1200 to 2800	15000	1.30	1700	0.80	0.38	0.065	0.020	135	4
IRK-700	701	100	1200 to 2200	22500	1.30	2000	0.70	0.15	0.072	0.020	135	4
IRK-1000	1000	100	400 to 1600	31000	1.41	4000	0.85	0.15	0.042	0.020	135	5
IRK-95F	95	75	400 to 600	1080	2.05	300	1.01	3.5	0.450	0.550	125	1
IRK-196F	195	100	400 to 600	4750	1.65	612	0.75	0.92	0.200	0.035	125	2

HIGH VOLTAGE DIODE / DIODE MODULES

IRK231	230	100	1400-2600	7015	1.29	722	0.79	0.63	0.160	0.035	135	3
IRK320	320	100	4600-6500	7000	2.40	1570	0.95	1.10	0.068	0.020	135	4
IRK435	435	85	3000-4200	12000	2.30	2100	0.85	0.33	0.065	0.020	135	4

POWER MODULES - NON-ISOLATED (3 THYRISTOR)

Type No.	I _{T(AV)}	@T _C	I _{RMS}	V _{RRM}	I _{TSM}	I ² t	V _{TM}	@I _{TM}	V _{GT}	I _{GT}	dv/dt	di/dt	R _{th} JC	T _j Max.	Ref.Fig.
					10ms										
	A	°C	A	V	A	A ² Sec.	V	A	V	mA	V/μSec	A/μSec	°C/W	°C	
RHTT60A40	60	123	94	400	1640	13500	1.25	180	2.0	150	50	50	0.35	150	6
RHTT80A40	80	116	125	400	2280	26000	1.20	240	2.0	150	50	50	0.35	150	6
RHTT100A40	100	114	157	400	3200	51000	1.20	314	2.0	150	50	50	0.30	150	6
RHTT130A40	130	112	204	400	3200	51000	1.20	410	2.0	150	50	50	0.20	150	6
RHTT200A40	200	121	314	400	5400	1499400	1.20	630	2.0	150	200	50	0.12	150	7

POWER MODULES - THYRISTOR / THYRISTOR. THYRISTOR / DIODE

Type No.	I _{T(AV)}	@T _C	V _{RRM} RANGE	I _{TSM}	V _{TM}	@I _{TM}	V _o	r	V _{GT}	I _{GT}	dv/dt	di/dt	R _{thJC}	R _{thcs}	T _j Max	Ref.Fig.
	I _{F(AV)}			I _{FSM}	V _{FM}	I _{FM}	T _J =T _J max									
	A	%C	V	A	V	A	V	mΩ	V	mA	V/μSec	A/μSec	%C/W	%C/W	%C	
IRK-26	27	85	400 to 1600	595	1.95	85	0.91	12.4	2.5	150	500	100	0.310	0.10	125	1
IRK-41	45	85	400 to 1600	850	1.81	141	0.90	6.58	2.5	150	500	100	0.230	0.10	125	1
IRK-56	60	85	400 to 1600	1310	1.54	188	0.81	3.35	2.5	150	500	100	0.200	0.10	125	1
IRK-71	75	85	400 to 1600	1665	1.59	235	0.76	2.98	2.5	150	500	100	0.165	0.10	125	1
IRK-91	95	85	400 to 1600	1785	1.58	298	0.78	5.00	2.5	150	500	100	0.135	0.10	125	1
IRK-105	105	85	400 to 1600	1785	1.64	330	0.80	2.37	2.5	150	500	100	0.135	0.10	125	1
IRK-136	135	85	400 to 1600	3200	1.66	424	0.98	1.62	3.0	200	500	100	0.200	0.035	125	2
IRK-142	140	85	400 to 1600	4750	1.32	440	1.14	1.29	3.0	200	500	100	0.170	0.035	125	2
IRK-162	160	85	400 to 1600	5100	1.26	503	0.88	1.20	3.0	200	500	100	0.170	0.035	125	2
IRK-170	170	85	400 to 1600	5100	1.60	534	0.89	1.34	3.0	200	500	100	0.170	0.020	125	3
IRK-230	230	85	400 to 1600	7500	1.59	722	1.03	0.77	3.0	200	500	100	0.125	0.020	125	3
IRK-250	250	85	400 to 1600	8500	1.44	785	0.97	0.60	3.0	200	500	100	0.125	0.020	125	3
IRK-280	280	79	400 to 2200	7500	1.55	750	0.90	0.75	3.0	200	500	100	0.110	0.020	125	3
IRK-330	330	85	400 to 1800	8000	1.44	1036	0.80	0.45	2.0	200	500	100	0.110	0.020	125	3
IRK-500	540	85	400 to 1800	15000	1.60	1500	0.92	0.24	3.0	200	500	100	0.062	0.020	125	4
IRK-570	570	85	400 to 1800	15500	1.44	1700	0.78	0.20	3.0	200	500	100	0.069	0.020	125	4
IRK-650	650	85	1000 to 1200	14000	1.40	1978	0.85	0.10	2.5	250	500	100	0.065	0.020	125	4
IRK-715	715	85	1000 to 1800	28000	1.45	2512	0.85	0.20	2.5	250	500	100	0.050	0.016	125	5
IRK-800	800	78	1000 to 1800	28000	1.45	2512	0.85	0.20	2.5	250	500	100	0.050	0.016	125	5
IRK-1000	1000	77	1000 to 1200	32000	1.25	3140	0.90	0.04	2.5	250	500	100	0.050	0.016	125	5

Note: dv/dt 1000v/us is available on request.

HIGH VOLTAGE - THYRISTOR / THYRISTOR. THYRISTOR / DIODE MODULES

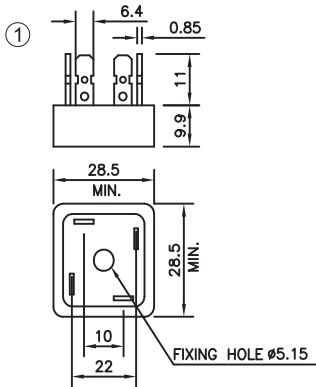
IRK136	130	85	1400-2600	3200	1.66	408	0.98	1.62	3.03	200	500	100	0.2	0.035	125	2
IRK160	160	85	2000-3600	4000	2.6	1000	1.2	2.3	2	200	500	100	0.125	0.04	125	3
IRK185	185	85	1500-3000	7500	2.6	1000	1.14	0.78	2	200	500	100	0.125	0.04	125	3
IRK240	240	85	2800-3600	5400	3.43	1200	1.17	1.7	2	200	500	100	0.078	0.02	125	4



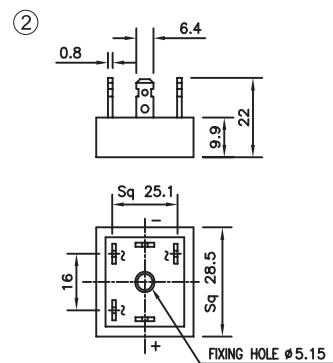
ULTRA FAST RECOVERY DIODE MODULE

Type No.	$I_{F(AV)}$	@ T_C	V_{RRM} RANGE	I_{FSM}	V_{FM}	@ I_{FM}	trr IFM=100A,VR=200V di/dt=100A/us ns	$R_{th JC}$	T_j	Physical Dimension
	A	°C	V	A	V	A		°C/W	°C	Ref.Fig.
RIRP200..F	200	100	200 - 400	2000	1.3	200	90	0.320	150	3
RIRP300..F	300	100	200 - 400	2500	1.75	300	90	0.320	150	3
RIRP400..F	400	100	200 - 400	2500	1.95	400	90	0.320	150	3

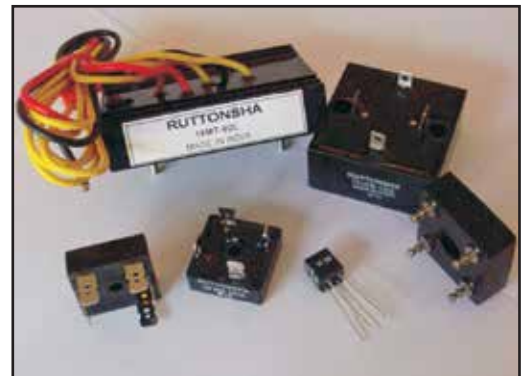
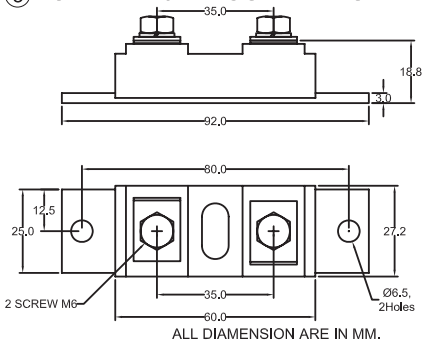
DIODE BRIDGE RECTIFIER - SINGLE PHASE



DIODE BRIDGE RECTIFIER - THREE PHASE

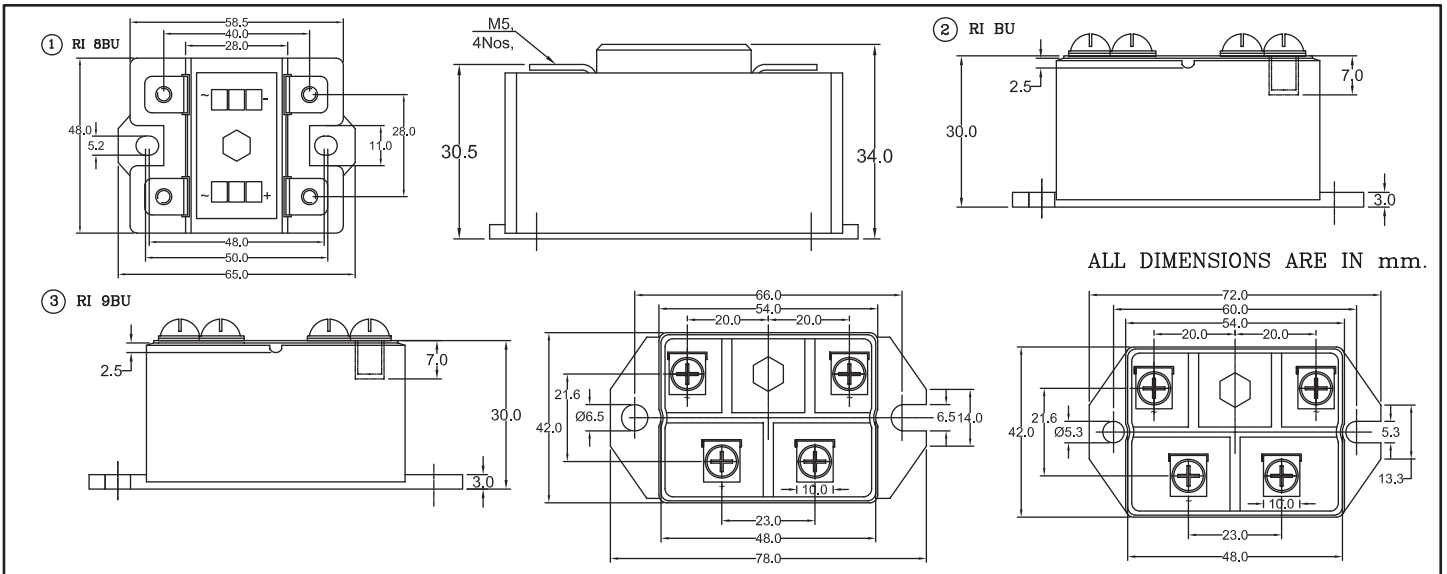


③ ULTRA FAST RECOVERY DIODE MODULE



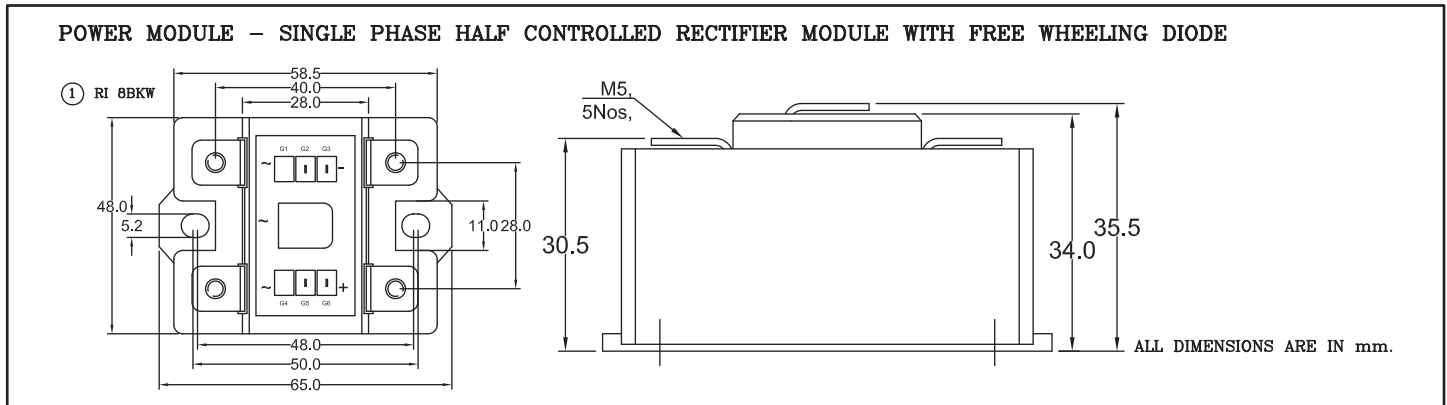
SINGLE PHASE DIODE BRIDGE MODULE

Type No.	Voltage Range	$I_{O(AV)}$	T_c	V_{FM} Per Diode	$@I_{FM}$	I_{FSM} 10ms	V_O $T_j = T_j \text{ max}$	r_o	R_{thj-hs}	$T_j - \text{max}$	V_{ins}	Fig.
	V	A	$^{\circ}C$	V	A	A	V	m Ω	$^{\circ}C/W$	$^{\circ}C$	V	
RI 8BU30	400 - 1800	30	110	1.3	80	370	0.85	12	0.545	125	2500	1
RI 8BU60	400 - 1800	60	88	1.6	150	1000	0.85	5	0.300	125	2500	1
RIBU52	400 - 1800	50	99	1.8	150	500	0.85	8	0.375	150	2500	2
RIBU72	400 - 1800	70	101	1.6	150	750	0.85	5	0.275	150	2500	2
RI 9BU25	400 - 1800	30	110	1.3	80	370	0.85	12	0.250	125	2500	3
RI 9BU55	400 - 1800	52	100	1.75	75	370	0.85	12	0.200	125	2500	3



SINGLE PHASE HALF CONTROLLED BRIDGE RECTIFIER MODULE

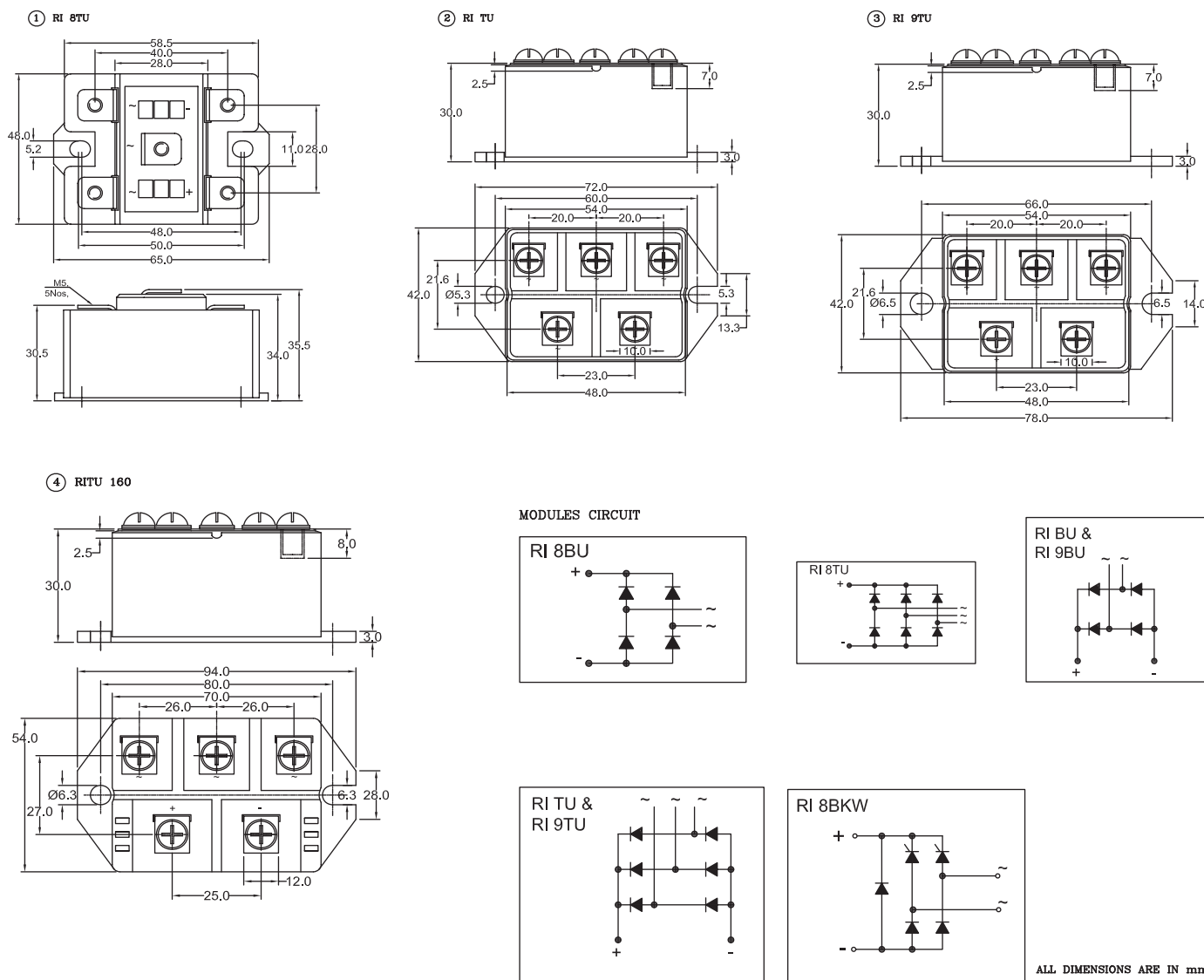
Type No.	$I_{T(AV)}$	TC	V_{RRM}	I_{TSM}	V_{TM} Per SCR	I_{TM}	V_{GT}	I_{GT}	dv/dt	di/dt	$R_{th JC}$	T_j Range	Fig.
			Range	10ms	V_{FM} Per Diode								
			V	A	V								
RI8BKW	41	88	800-1400	470	2.3	75	2.0	60	500	150	1	-40 to 125	1
RI8BKW	61	85	800-1400	470	2.3	75	2.0	60	500	150	1	-40 to 125	1



THREE PHASE DIODE BRIDGE MODULES

Type No.	Voltage Range	$I_{O(AV)}$	T_c	V_{FM}	$@I_{FM}$	I_{FSM}	V_O	r_o	R_{th-htc}	$T_j \text{ max}$	Vins	Fig.
	V	A	°C	V	A	A	V	mΩ	°C/W	°C	V	
RI 8TU30	400-1800	40	90	1.3	80	370	0.85	12	0.43	125	2500	1
RI 8TU60	400-1800	60	102	1.6	150	1000	0.85	5	0.167	125	2500	1
RI 8TU100	400-1800	100	93	1.35	150	1150	0.85	5	0.14	125	2500	1
RITU62	400-1800	60	110	1.8	150	500	0.85	8	0.25	150	2500	2
RITU82	400-1800	80	110	1.6	150	750	0.85	5	0.183	150	2500	2
RI 9TU25	400-1800	25	110	1.3	80	370	0.85	12	0.25	125	2500	3
RI 9TU55	400-1800	55	100	1.75	75	370	0.85	12	0.2	125	2500	3
RI 9TU110	400-1800	110	100	1.35	150	1150	0.85	4	0.15	150	2500	3
RITU160	400-1800	160	100	1.65	300	1800	0.85	3	0.11	150	2500	4

THREE PHASE DIODE MODULE





800.348.5580
630.208.2200



rellpower@rell.com
rellpower.com



RUTTONSHA

RUTTONSHA
INTERNATIONAL RECTIFIER LIMITED

CORPORATE OFFICE : 139/141, Solaris 1, B-Wing, 1st Floor, Saki Vihar Road, Powai,
Andheri (East), Mumbai - 400 072. Maharashtra • Tel. : +91-22 28471956, 57, 58 • Fax : +91-22 28471959
E-mail : rirbom@ruttonsha.com

FACTORY : 338, International House, Baska, Halol, Dist. Panchmahals, Pin - 389 350. Gujarat (India)
Tel. : (91-2676) 247281 / 247185 / 247094 • Fax : (91-2676) 247035 • E-mail : rirbsk@ruttonsha.com

BANGALORE : No. 532/21/6, 1st Floor, 63rd Cross 5th Block, 12th Main Road, Rajaji Nagar, Bangalore - 560 010.
Tel : +91 80 23353498 • Mob : +91 8088040076 • Email : rirbng@ruttonsha.com

URL www.ruttonsha.com