

MAXIMUM RATINGS

CHARACTERISTIC		Repetitive Peak Off-State Voltage	Repetitive Peak Reverse Voltage	R.M.S On- State Current	Peak One-Cycle Surge On-State Current	I ² t Limit Value (t=1ms~10ms)	Peak Gate Power Dissipation	Peak Reverse Gate Voltage	Junction Tempera- ture	Storage Tempera- ture Range
SYMBOL		V _{DRM}	V _{RRM}	I _{T(RMS)}	I _{TSM}	I ² t	P _{GM}	V _{GRM}	T _j	T _{stg}
UNIT		V	V	A	A	A ² ·S	W	V	°C	°C
TYPE	Section									
S6098	Discharge	400	400	3.0	70	24.5	3	-7	-25~100	-25~125
SH3G15		400	400	4.7	110	60	5	-7	-25~100	-25~125
S6095		400	400	4.7	100	50	5	-7	-25~100	-25~125
SF2G41LC2	Quench	400	400	3.0	20	1.6	0.1	-5	-40~110	-40~100
S6111		400	400	4.0	70	24.5	3	-5	-25~100	-40~125
S6146		400	400	2.0	30	4.5	3	-7	-25~70	-25~70
SF0R1G42 IG5	Trigger	400	400	0.15	4	0.08	0.1	-5	-40~110	-40~125
SF0R3G42 IG5		400	400	0.45	9	0.4	0.1	-5	-40~110	-40~125

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC		Repetitive Peak Off-State Current and Repetitive Peak Reverse Current	Peak On-State Voltage	Gate Trigger Current	Gate Trigger Voltage	Gate Non-Trigger Voltage	Holding Current		CriticalRate of Rise of Off-State Voltage	Turn-Off Time**
SYMBOL		I _{DRM} , I _{RRM}	V _{TM}	I _{GT}	V _{GT}	V _{GD}	I _H		dv/dt	t _q
CONDITION		V _{DRM} =V _{RRM} =Rated	I _{TM} =12A	V _D =12V	V _D =12V	V _D =12V	R _L =20Ω		V _D =350V T _C =100°C	V _D =350V T _a =40°C
MAX. or MIN.		MAX.	MAX.	MAX.	MAX.	MIN.	MAX.	MIN.	MIN.	MAX.
UNIT		μA	V	mA	V	V	mA	mA	V/μs	μs
TYPE	Section									
S6098	Discharge	100	2.7	50	3.0	0.2	150	—	50	6
SH3G15		750	2.3	50	3.0	0.2	120	—	50	10
S6095		200	2.3	50	3.0	0.2	120	—	50	6
SF2G41LC2	Quench	200	2.0	0.2	0.8	0.2		5(Typ.)	15	—
S6111		100	2.7	50	3.0	0.3	200	50	50 ***	—
S6146		100	2.3	50	3.0	0.2		30	50	—
SF0R1G42 IG5	Trigger	10	2.0(at 2A)	0.2 *	0.8	0.2	5	0.1	15	—
SF0R3G42 IG5		10	2.0(at 2A)	0.2 *	0.8	0.2	5	0.1	15	—

* Selective standard I_{GT}=3~40μA, I_{GT}=10~50μA*** T_C=70°C

** Circuit turn-off time

Unit in mm

SF0R1G42 IG5 SF0R3G42 IG5 1. GATE 2. ANODE 3. CATHODE JEDEC TO-92 EIAJ SC-43 TOSHIBA 13-5A1A	SH3G15 1. GATE 2. ANODE CATHODE JEDEC TO-66 EIAJ TC-16A, TB-23 TOSHIBA 13-13B1A AC20C is furnished as an accessory.	S6095 1. CATHODE 2. ANODE 3. GATE JEDEC TO-220AB EIAJ SC-46 TOSHIBA 13-10B1A	S6098 SF2G41LC2 S6111 S6146 1. CATHODE 2. ANODE 3. GATE TOSHIBA 13-10C1A
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