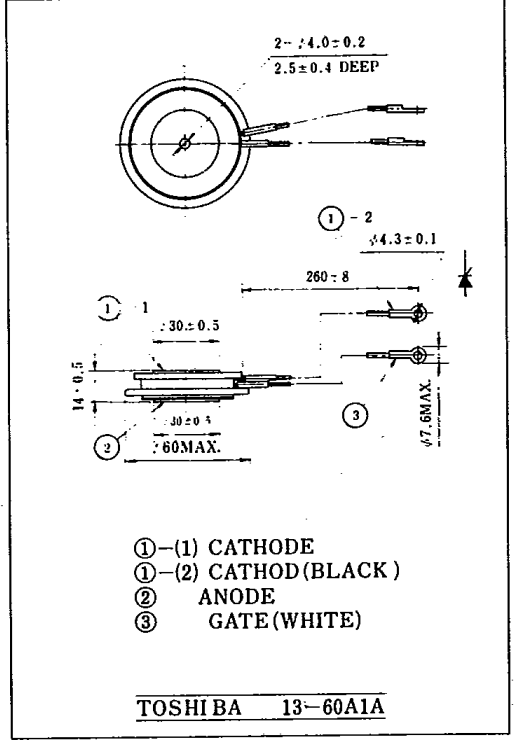


MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage	SF400G26	400	V
	SF400J 26	600	
	SF400L26	800	
	SF400N26	1000	
	SF400Q26	1200	
	SF400R26	1300	
	SF400U26	1600	
Non-Repetitive Peak Reverse Voltage (Non-Rep <5ms)	SF400G26	500	V
	SF400J 26	720	
	SF400L26	960	
	SF400N26	1200	
	SF400Q26	1450	
	SF400R26	1500	
	SF400U26	1850	
R.M.S On-State Current	IT(RMS)	628	A
Average On-State Current (Half Sine Waveform Tc=35°C)	IT(AV)	400	A
Peak One Cycle Surge On-State Current (Non-Repetitive)	ITSM	7000(50Hz)	A
		7300(60Hz)	
L ² t Limit Value	I ² t	245 × 10 ³	A ² s
Critical Rate of Rise of On-State Current (Note 1)	di/dt	100	A/μs
Peak Gate Power Dissipation	PGM	16	W
Average Gate Power Dissipation	PG(AV)	3	W
Peak Forward Gate Current	IGM	4	A
Peak Forward Gate Voltage	VFGM	16	V
Peak Reverse Gate Voltage	VRGM	-5	V
Junction Temperature	Tj	-40 ~ 125	°C
Storage Temperature Range	Tstg	-40 ~ 125	°C
Mounting Force Required (Note 2)	—	900 ~ 1100	kg

Note 1 : VD=0.5Rated, Tc=120°C, ITM=800A, Gate Supply (VG=15V, RG=8Ω, tr≤1μs)
 Note 2 : Recommended value; 1000±50kg



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	MAX.	UNIT	
Repetitive Peak Off-State Current and Repetitive Peak Reverse Current	IDRM and IRRM	VDRM=VRRM=Rated Tj=125°C	—	20	mA	
	Peak On-State Voltage	VTM	ITM=1250A, Tc=25°C	—	1.80	V
Gate Trigger Voltage	VGT	VD=6V, RL=6Ω	Tc=-40°C	—	4.5	V
			Tc=25°C	—	3.5	
			Tc=-40°C	—	400	mA
			Tc=25°C	—	260	
Gate Trigger Current	IGT		0.15	—	V	
Gate Non-Trigger Voltage	VGD	VD=0.5Rated, Tc=125°C	1.5	—	mA	
Gate Non-Trigger Current	IGD	VD=0.5Rated, Tc=125°C	—	4	μs	
Delay Time	td	VD=0.5Rated, Tc=25°C	—	6	μs	
Turn-On Time	tgt	Gate Supply (VG=15V, RG=8Ω, tr≤1μs)	—	150 (Typ.)		
Turn-Off Time	tq	IT=800A, VR≥50V, dv/dt=20V/μs, VD=0.5Rated, Tc=120°C	200	—	V/μs	
Critical Rate of Rise of Off-State Voltage	dv/dt	VDRM=2/3Rated, Tj=125°C, Gate open, Exponential rise	—	300	mA	
Holding Current	IH	RL=6Ω, Tc=25°C	—	0.05	°C/W	
Thermal Resistance *	Rth(j-f)	DC	—	—		

* Junction to Fin

GATE TRIGGERING CHARACTERISTICS

