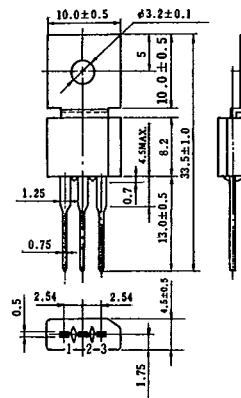


MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage	SF2B41 SF2D41 SF2G41 SF2J41	V_{DRM} and V_{RRM}	100 200 400 600	V
Non-Repetitive Peak Reverse Voltage (Non-Rep <5ms) $T_c=0\sim 110^\circ\text{C}$	SF2B41 SF2D41 SF2G41 SF2J41	V_{RSM}	150 300 500 720	V
R.M.S On-State Current	$I_{T(RMS)}$	3.1	A	
Average On-State Current (Half Sine Waveform $T_c=45^\circ\text{C}$)	$I_{T(AV)}$	2.0	A	
Peak One Cycle Surge On-State Current (Non-Repetitive)	I_{TSM}	22(60Hz) 20(50Hz)	A	
I^2t Limit Value ($t=1\text{ms}\sim 10\text{ms}$)	I^2t	1.6	A^2S	
Peak Gate Power Dissipation	P_{GM}	0.1	W	
Average Gate Power Dissipation	$P_{G(AV)}$	0.01	W	
Peak Forward Gate Voltage	I_{GM}	100	mA	
Peak Reverse Gate Voltage	V_{RGM}	-5	V	
Junction Temperature	T_j	-40~110	$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-40~110	$^\circ\text{C}$	
Weight		1.5	g	



1. CATHODE
2. ANODE
3. GATE

JEDEC	-
EIAJ	-
TOSHIBA	13-10A1A

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Repetitive Peak Off-State Current and Repetitive Peak Reverse Current	I_{DRM} and I_{RRM}	$V_{DRM}=V_{RRM}=\text{Rated}$ $T_j=110^\circ\text{C}$, $R_{GK}=1\text{k}\Omega$	-	-	200	μA
Peak On-State Voltage	V_{TM}	$I_{TM}=10\text{A}$, $T_c=25^\circ\text{C}$	-	-	2.0	V
Gate Trigger Voltage	V_{GT}	$V_D=6\text{V}$, $R_L=100\Omega$, $R_{GK}=1\text{k}\Omega$, $T_c=25^\circ\text{C}$	-	-	0.8	V
Gate Trigger Current	I_{GT}	$V_D=6\text{V}$, $R_L=100\Omega$, $R_{GK}=1\text{k}\Omega$, $T_c=25^\circ\text{C}$	-	-	200	μA
Gate Non-Trigger Voltage	V_{GD}	$V_D=\text{Rated}$, $R_{GK}=1\text{k}\Omega$, $T_c=110^\circ\text{C}$	0.2	-	-	V
Critical Rate of Rise of Off-State Voltage	dv/dt	$V_{DRM}=\text{Rated}$, $R_{GK}=1\text{k}\Omega$ Exponential rise $T_j=110^\circ\text{C}$	-	15 *10	-	$\text{V}/\mu\text{s}$
Holding Current	I_H	$R_L=100\Omega$, $R_{GK}=1\text{k}\Omega$, $T_c=25^\circ\text{C}$	-	3.0	-	mA
Thermal Resistance *	$R_{th(j-c)}$	DC	-	-	12	$^\circ\text{C}/\text{W}$

* Junction to Case * SF2J41

GATE TRIGGERING CHARACTERISTICS

