

TOSHIBA (DISCRETE/OPTO)

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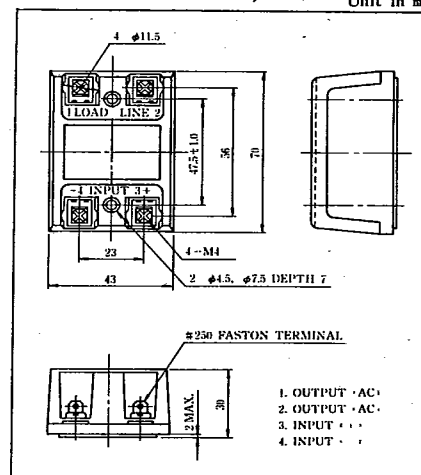
TSS25J41S

600V 25A

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output	Repetitive Peak Off-state Voltage	TSS25D41S	200	V
		TSS25G41S	400	
		TSS25H41S	500	
		TSS25J41S	600	
Input	RMS On-state Current	$I_{T(RMS)}$	25	A
	Peak One Cycle Surge On-state Current (Non-Repetitive)	I_{TSM}	253 (60Hz) 230 (50Hz)	A
	Operating Frequency Range	f	45~65	Hz
	Control Input Voltage (DC)	$V_{F(IN)}$	6	V
	Control Input Current (DC)	$I_{F(IN)}$	20	mA
	Input Resistance	TSS25D41S TSS25G41S TSS25H41S TSS25J41S	300(Typical) 200(Typical)	Ω
Input/output	Isolation ($t = 1$ min.)	AC	BVs/AC	V
	Input to Output	DC	BVs/DC	
	Operating Temperature Range	T_{op}	-30~80	$^{\circ}\text{C}$
	Storage Temperature Range	T_{stg}	-30~80	$^{\circ}\text{C}$

Unit in mm



ELECTRICAL CHARACTERISTICS

CHARACTERISTIC		SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Input	Pick Up Voltage	V_{FT}	$V_{W(RMS)} = 100V_{rms}$	—	—	4.5	V
	Pick Up Current	I_{FT}		—	—	8	mA
	Drop Out Voltage	V_{FD}		1	—	—	V
	Drop Out Current	I_{FD}		1	—	—	mA
Output	Off-state Leakage Current	I_{DR}	$V_{DR} = \text{Rated (DC Voltage)}$	—	—	10	mA
	Peak On-state Voltage	V_{TM}	$I_{TM} = 40A$	—	—	1.6	V
	Peak Turn-on Voltage	V_{ON}	$V_{W(RMS)} = 100V_{rms}$	—	—	7	V
	DC Holding Current	I_H	$R_L = 100\Omega$	—	—	60	mA
	dv/dt (Off-state)	dv/dt	$V_{DRM} = 0.7 \text{ Rated}$	50	—	—	V/ μs
	dv/dt (Commutating)	$dv/dt (c)$	$V_{DRM} = 0.7 \text{ Rated}$ $I_T = 25A$	2	—	—	V/ μs
Input/output	Turn-on Time	t_{on}	$V_{W(RMS)} = 100V_{rms}$	—	—	1/2	Cycle
	Turn-off Time	t_{off}		—	—	1/2	Cycle
	Isolation Resistance	R_s	$V = 1kV$, $R_H = 40 \sim 60\%$	—	10^9	—	Ω
Thermal Resistance		$R_{th(j-c)}$	AC	—	—	—	$^{\circ}\text{C/W}$

CHARACTERISTIC CURVES

