

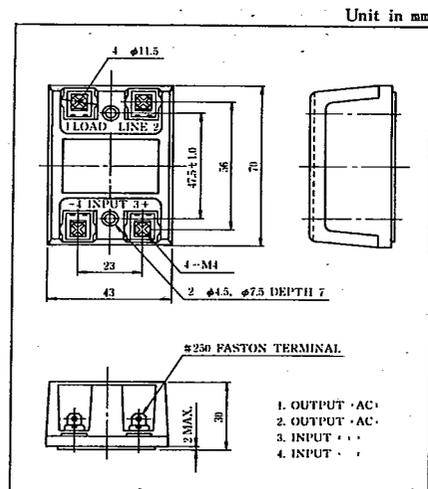
TOSHIBA [DISCRETE/OPTO]

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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		
	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	
Input	Control Input Voltage (DC)		$V_{F(IN)}$	6	V
	Control Input Current (DC)		$I_{F(IN)}$	20	mA
	Input Resistance	TSS25D41S	$R_{(IN)}$	300(Typical)	Ω
TSS25G41S					
TSS25H41S					
Input/output	Isolation (t = 1 min.)	AC	BV_s/AC	1500	V
		DC	BV_s/DC	2000	
	Operating Temperature Range		T_{op}	-30~80	$^{\circ}C$
	Storage Temperature Range		T_{stg}	-30~80	$^{\circ}C$



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	$V=1kV, R_H=40\sim60\%$	-	10^9	-	Ω
	Thermal Resistance	$R_{th(j-c)}$	AC	-	-	-	$^{\circ}C/W$

CHARACTERISTIC CURVES

