

TOSHIBA (DISCRETE/OPTO)

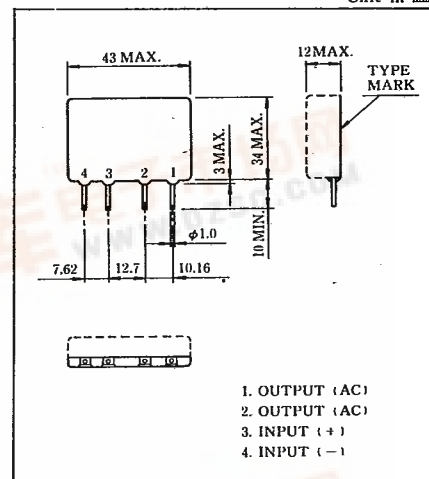
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Unit in mm

TSZ1J44S 600V 1A

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output	Repetitive Peak Off-state Voltage	TSZ1D44S	200	V
		TSZ1G44S	400	
		TSZ1H44S	500	
		TSZ1J44S	600	
	RMS On-state Current	$I_{T(RMS)}$	1	A
	Peak One Cycle Surge On-state Current (Non-Repetitive)	I_{TSM}	13(60Hz) 12(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	$R_{(IN)}$	300(Typical)	Ω
Input/output	Isolation ($t=1$ min.)	AC	BVs/AC	V
	Input to Output	DC	BVs/DC	
	Operating Temperature Range	Top	-30~80	$^{\circ}\text{C}$
	Storage Temperature Range	Tstg	-30~80	$^{\circ}\text{C}$



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}	$V_{DR}=\text{Rated (DC Voltage)}$	—	—	1	mA
	Peak On-state Voltage	V_{TM}	$I_{TM}=6A$	—	—	2.6	V
	Peak Turn-on Voltage	V_{ON}	$V_{W(RMS)}=100V_{rms}$	—	—	10	V
	DC Holding Current	I_H	$R_L=100\Omega$	—	—	25	mA
	dv/dt (Off-state)	dv/dt	$V_{DRM}=0.7 \text{ Rated}$	10	—	—	V/ μs
	dv/dt (Commutating)	dv/dt (c)	$V_{DRM}=0.7 \text{ Rated } I_T=1A$	2	—	—	V/ μs
Input/output	Turn-on Time	t_{on}	$V_{W(RMS)}=100V_{rms}$	—	—	1	ms
	Turn-off Time	t_{off}		—	—	1/2	Cycle
	Isolation Resistance	R_S	$V=1kV, R_H=40\sim60\%$	—	10^9	—	Ω

CHARACTERISTIC CURVES

