

# SSR (ZERO-CROSS TYPE)

TOSHIBA (DISCRETE/OPTO)

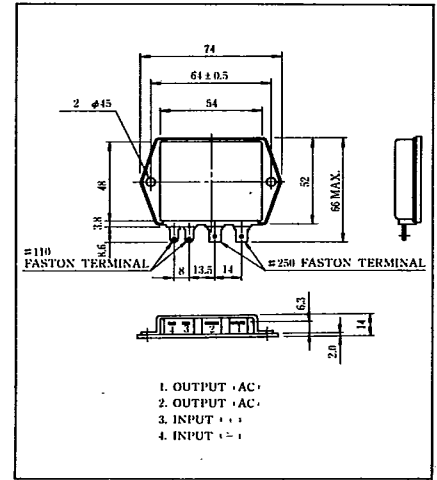
39 DE 9097250 0002378 1

**TSS16J11S** 600V 16A

Unit in mm

## MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Output	Repetitive Peak Off-state Voltage	TSS16D11S	200	V	
		TSS16G11S	400		
		TSS16H11S	500		
		TSS16J11S	600		
RMS On-state Current		$I_{T(RMS)}$	16	A	
Peak One Cycle Surge On-state Current (Non-Repetitive)		$I_{TSM}$	165(60Hz) 150(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)	$\Omega$
Input/output	Isolation (t = 1 min.) Input to Output	AC	BVs/AC	1500	V
		DC	BVs/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	$V_{TM}$	$I_{TM} = 25A$	-	-	1.4	V
	Peak Turn-on Voltage	$V_{ON}$	$V_{W(RMS)}=100V_{rms}$	-	-	7	V
	DC Holding Current	$I_H$	$R_L = 100\Omega$	-	-	110	mA
	dv/dt (Off-state)	dv/dt	$V_{DRM} = 0.7 \text{ Rated}$	50	-	-	V/ $\mu s$
	dv/dt (Commutating)	dv/dt (c)	$V_{DRM} = 0.7 \text{ Rated } I_T = 16A$	2	-	-	V/ $\mu s$
Input/output	Turn-on Time	ton	$V_{W(RMS)}=100V_{rms}$	-	-	1/2	Cycle
	Turn-off Time	toff		-	-	1/2	Cycle
	Isolation Resistance	$R_s$	$V = 1kV, RH = 40 \sim 60\%$	-	$10^9$	-	$\Omega$
	Thermal Resistance	$R_{th(j-c)}$	AC	-	-	2	$^{\circ}C/W$

## CHARACTERISTIC CURVES

