



## 16A TRIACS

## SM16JZ51

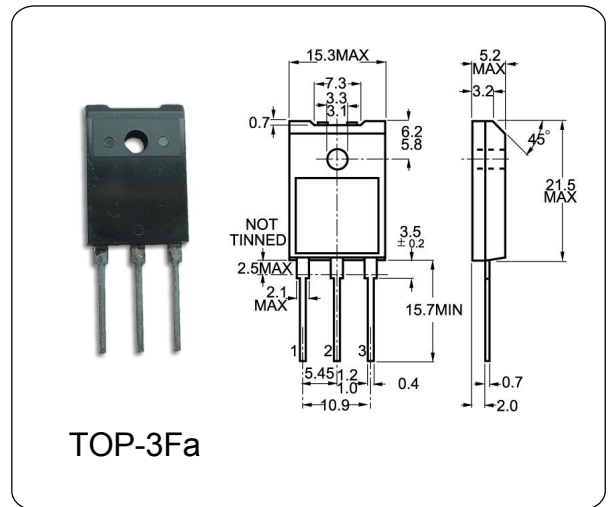
### GENERAL DESCRIPTION

Available either in through-hole or surface-mount packages, the SM16JZ51 triac series is suitable for general purpose AC switching. They can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits... or for phase control operation in light dimmers, motor speed controllers, ...

The snubberless versions are specially recommended for use on inductive loads, thanks to their high commutation performances. By using an internal ceramic pad,

### ABSOLUTE MAXIMUM RATINGS ( Ta = 25 °C)

PARAMETER	Symbol	Value	Unit
Repetitive peak off-state voltages	$V_{DRM}$	600	V
peak off-state reverse voltages	$V_{RRM}$	600	V
RMS on-state current	$I_T$	16	A
Non-repetitive peak on-state current	$I_{TSM}$	150	A
Max. Operating Junction Temperature	$T_j$	110	°C
Storage Temperature	$T_{stg}$	-45~150	°C



### ELECTRICAL CHARACTERISTICS ( Ta = 25 °C)

PARAMETER		Symbol	Test Conditions	Min.	Max	Unit
Repetitive peak off-state voltages		$V_{DRM}$	$I_D=0.1mA$	600	—	V
Repetitive peak off-state current		$I_{DRM}$	$V_{DRM}=520V$	—	20	uA
On-state voltage		$V_{TM}$	$I_T=22.5A$	—	1.5	V
Holding current		$I_H$	$I_T=1.0A, I_{GT}=50mA$	—	50	mA
Gate trigger Current	T2+G+	$I_{GT}$	$V_{AK}=12V, R_L=20\Omega$	—	30	mA
	T2+G-			—	30	
	T2-G-			—	30	
	T2-G+			—	—	
Gate trigger Voltage	T2+G+	$V_{GT}$	$V_D=12V, R_L=20\Omega$	—	1.5	V
	T2+G-			—	1.5	
	T2-G-			—	1.5	
	T2-G+			—	—	