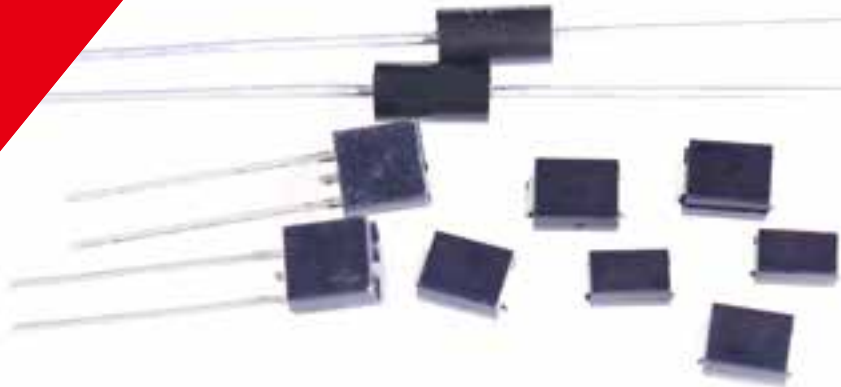


**RUILON**

瑞隆源电子



# Thyristor Surge Suppressors

**P0080TA-LC**

## Thyristor Surge Suppressors -P0080TA-LC

### Description

DO-214AC/SMA Series are low capacitance devices designed to protect broadband equipment such as VOIP, DSL modems and DSLAMs from damaging overvoltage transients.

The series provides a surface mount solution that enables equipment to comply with global regulatory standards while limiting the impact to broadband signals.



## Thyristor Surge Suppressors -P0080TA-LC

### Electrical Characteristics

Type Number	$V_{DRM}$	$V_S$	$I_H$	$I_S$	$I_T$	$V_T$	$C_J$
	V	V	MA	MA	A	V	PF
P0080TA-LC	6	25	50	800	2.2	4	25

Notes:

$V_{DRM}$ :Peak Off-state Voltage – maximum voltage that can be applied while maintaining off state

$V_S$ :Switching Voltage – maximum voltage prior to switching to on state

$I_H$ :Holding Current – minimum current required to maintain on state

$I_S$ :Switching Current – maximum current required to switch to on state

$I_T$ :On-state Current – maximum rated continuous on-state current


$V_T$ :On-state Voltage – maximum voltage measured at rated on-state current

$C_J$ :Off-state Capacitance – typical capacitance measured in off state

### Surge Ratings

Series	Peak Pulse Current-Ipp(A)				
	2/10 $\mu$ s	8/20 $\mu$ s	10/160 $\mu$ s	10/560 $\mu$ s	10/1000 $\mu$ s
A	200	150	100	60	50

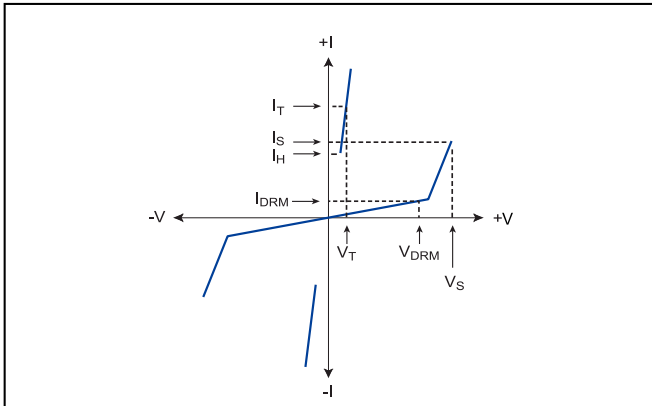
### Thermal Considerations

Package	Symbol	Parameter	Value	Unit
 DO-214AC	TJ	Operating Junction Temperature	-40 to +150	°C
	TS	Storage Temperature Range	-40 to +150	°C
	R $\theta$ JA	Junction to Ambient on printed circuit	120	°C/W

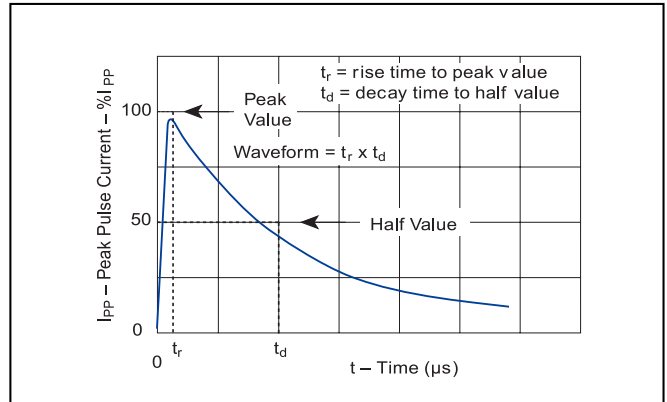
## Thyristor Surge Suppressors -P0080TA-LC

### Characteristics Curves

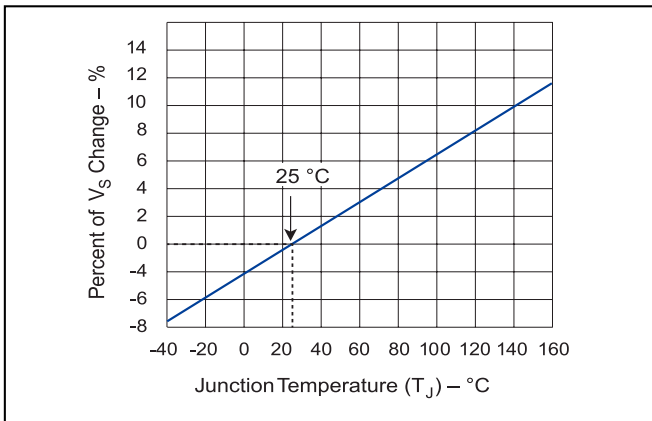
V-I Characteristics



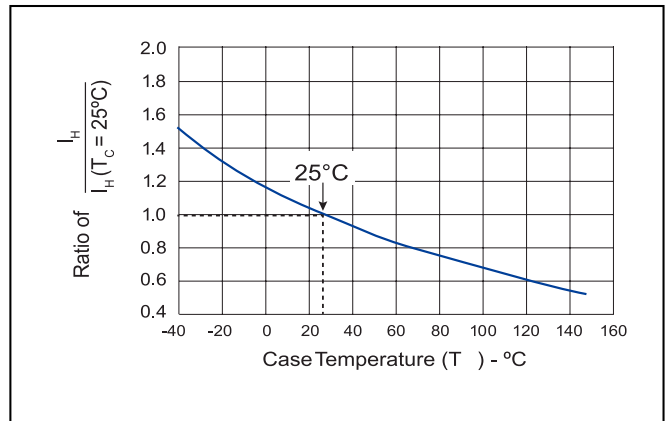
$t_r \times t_d$  Pulse Waveform



Normalized  $V_S$  Change vs. Junction Temperature

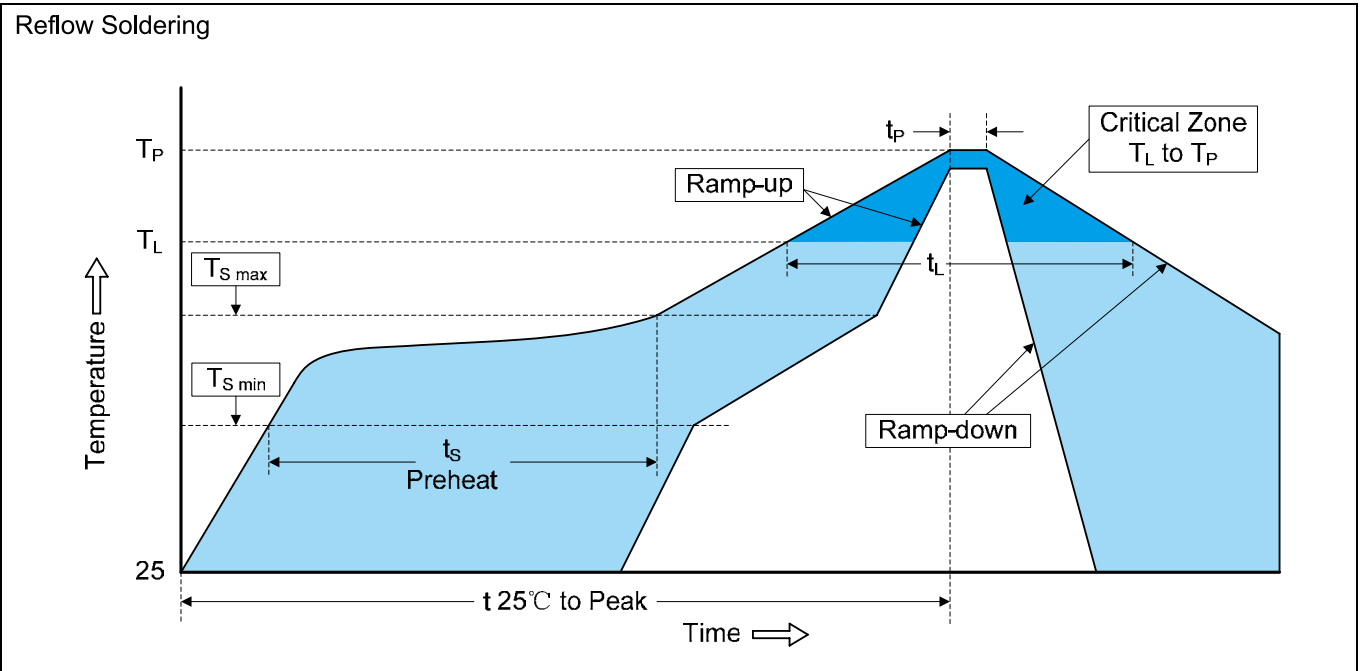


Normalized DC Holding Current vs. Case Temperature



## Thyristor Surge Suppressors -P0080TA-LC

### Recommended Soldering Conditions



#### Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate ( $T_L$ to $T_P$ )	3°C/second max.
Preheat	
-Temperature Min ( $T_{S\ min}$ )	150°C
-Temperature Max ( $T_{S\ max}$ )	200°C
-Time (min to max) ( $t_s$ )	60-180 seconds
$T_{S\ max}$ to $T_L$	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature ( $T_L$ )	217°C
-Time ( $t_L$ )	60-150 seconds
Peak Temperature ( $T_P$ )	260°C
Time within 5°C of actual Peak Temperature ( $t_p$ )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

## Thyristor Surge Suppressors -P0080TA-LC

### Packaging

Part Number	Component Package	Quantity	Packaging Option	Packaging Specification
P0080TA-LC	DO-214AA	5000	Tape & Reel	EIA RS-481

### Tape and Reel Specification

