

Description

thyristor 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.



DO-214AA/SMB

Features and Benefits

- Low voltage overshoot
- Low on-state voltage
- Does not degrade with use
- Fails short circuit when surged in excess of ratings
- Low Capacitance



Application Information

- Video

Electrical Characteristics

Part Number	V _{DRM} @ I _{DRM} =5μA	V _S @ 100V/μS	V _T @ I _T =2.2Amps	I _S	I _T	I _H	Capacitance @1MHz, 2V bias	
	V min	V max	V max	mA max	A max	mA min	pF min	pF max
YBS0060N-C	6	25	4	800	2.2	50	45	100

Absolute maximum ratings measured at T_A =25° C RH=45%-75%(unless otherwise noted).

1.Vs is measured at 100KV/S

2.Off-state Capacitance is measured at V_{DC}=2V,V_{RMS} =1V,f=1MH

Surge Ratings

Series	IPP					ITSM 50/60 H z	di/dt
	2x10 μs	8x20 μs	10x160 μs	50x320 μs	10x1000 μs		
	A min	A min	A min	A min	A min	A min	A/μs max
YBS	500	400	200	150	100	50	500

- Peak pulse current rating(I_{pp}) is repetitive and guaranteed for the life of the product;

- Yenji only makes the test for 5/320us@150A*(10/700us@6KV),but for other IPP value derived from experience is just for reference only.Yenji will not take any obligation for these parameters,so before applying our parts,please make sure to verify the parameters listed in the above table.

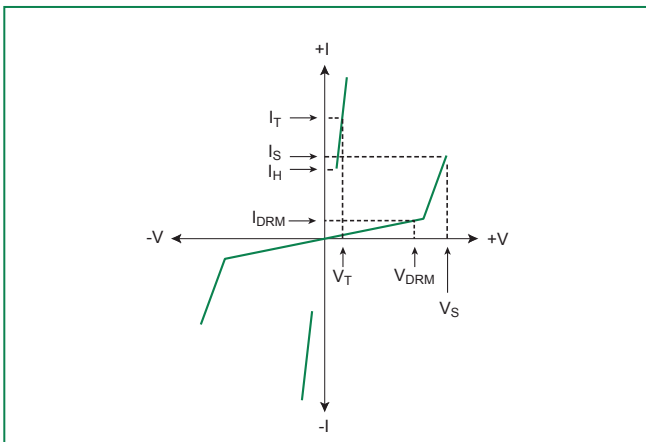
Part Numbering System

YBS	0060	N	C
(1)	(2)	(3)	(4)

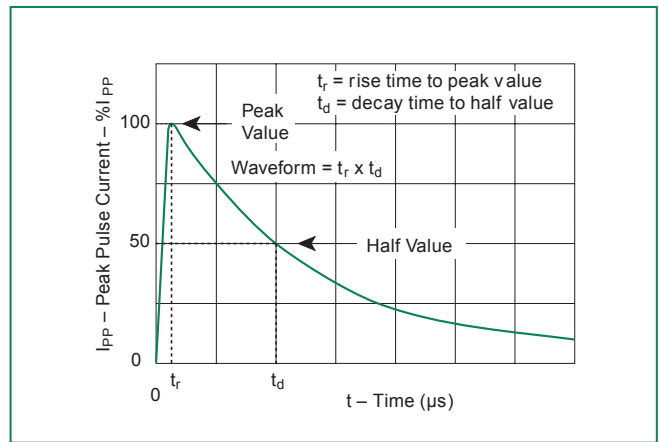
- (1) YENJI Semiconductor Surge Arrester
- (2) Off-state Voltage, e.g:0060=6V
- (3) Package:DO-214AA/SMB
- (4) Rating Surge Voltage:6KV (10/700uS)

Characteristics Curves

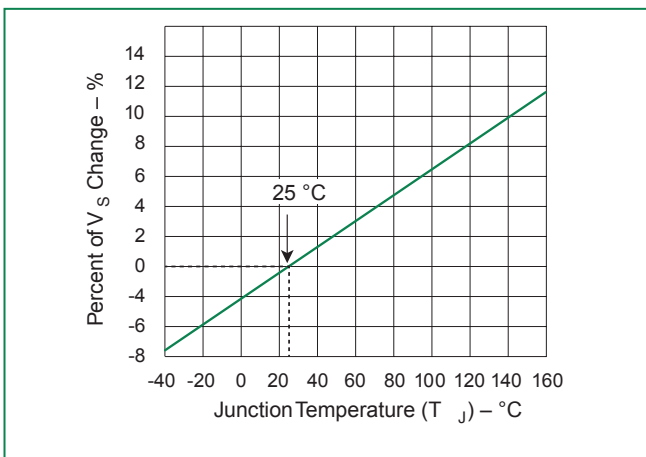
V-I Characteristics



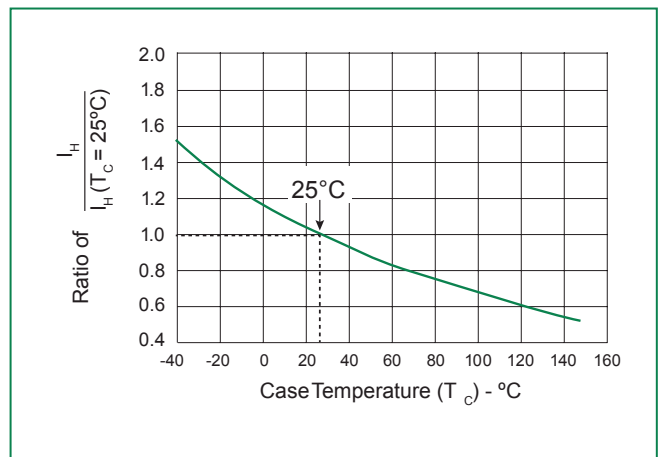
$t_r \times t_d$ Pulse Waveform

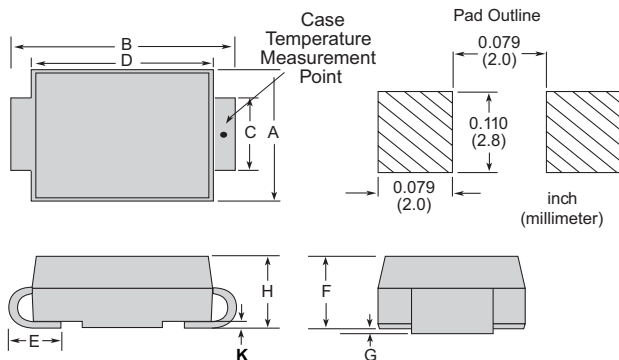


Normalized V_S Change vs. Junction Temperature



Normalized DC Holding Current vs. Case Temperature



Dimensions — DO-214AA


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.130	0.156	3.30	3.95
B	0.201	0.220	5.10	5.60
C	0.077	0.087	1.95	2.20
D	0.159	0.181	4.05	4.60
E	0.030	0.063	0.75	1.60
F	0.075	0.096	1.90	2.45
G	0.002	0.008	0.05	0.20
H	0.077	0.104	1.95	2.65
K	0.006	0.016	0.15	0.41

Thermal Considerations

Package	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature Range	-40 to +150	°C
	T_S	Storage Temperature Range	-65 to +150	°C
	$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W

Packing Options

Package Type	Description	Quantity	Added Suffix	Industry Standard
YBS0060N-C	DO-214AA Tape & Reel Pack	2500	N/A	EIA-481-D

Tape and Reel Specification-DO-214AA
