

## TRANSIENT VOLTAGE SUPPRESSOR TYPE 50A

### Features

- High Surge Capability
- High Current Capability
- Low leakage

50Amp  
BUTTON DIODE

### Maximum Ratings

Operating Temperature: -65 °C to +175 °C  
Storage Temperature: -65 °C to +175 °C

Part Number	Blocking Voltage AT I <sub>Z</sub>		Reverse Current I <sub>Z</sub>	Maximum Reverse Current AT *V <sub>R</sub>	
	MIN	MAX		25 °C	150 °C
AR(S)5022	20V	24V	100mA	0.20uA	50uA
AR(S)5025	24V	32V	100mA	0.20uA	50uA
AR(S)5039	37V	41V	100mA	0.20uA	50uA

AR(S)5022 \*V<sub>R</sub>=16V

AR(S)5025 \*V<sub>R</sub>=20V

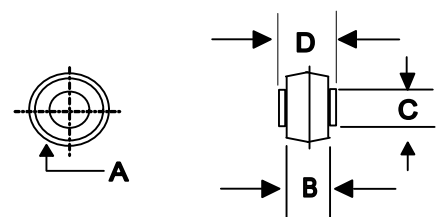
AR(S)5039 \*V<sub>R</sub>=28V

### Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	50 A	T <sub>C</sub> =150 °C
Peak Forward Surge Current	I <sub>FSM</sub>	500A	8.3ms, Halfsine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.05V	I <sub>FM</sub> = 100A; T <sub>J</sub> = 25 °C
Forward Voltage Temperature Coefficient @I <sub>F</sub> =10mA	V <sub>FTC</sub>	2mV/°C	

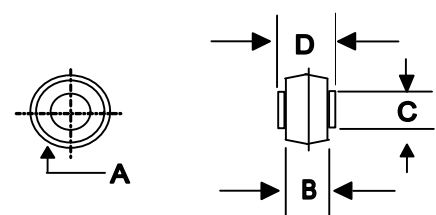
\*Pulse Test: Pulse Width 300 usec, Duty Cycle 2%

BUTTON-AR



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.380	.410	9.7	10.4	
B	.165	.185	4.20	4.70	
C	.215	.225	5.50	5.70	
D	.235	.250	6.00	6.40	

BUTTON-ARS



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.327	.347	8.30	8.90	
B	.165	.185	4.20	4.70	
C	.215	.225	5.50	5.70	
D	.235	.250	6.00	6.40	

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

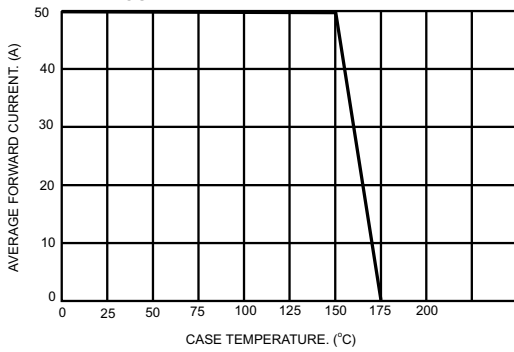


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

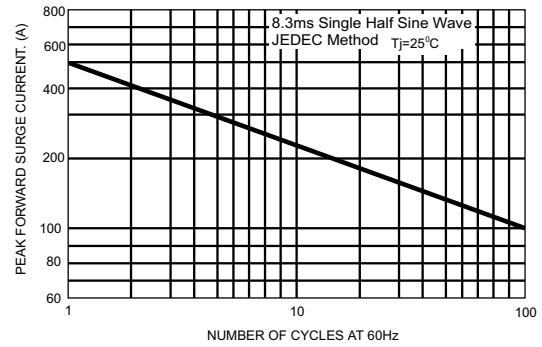


FIG.3- TYPICAL FORWARD CHARACTERISTICS

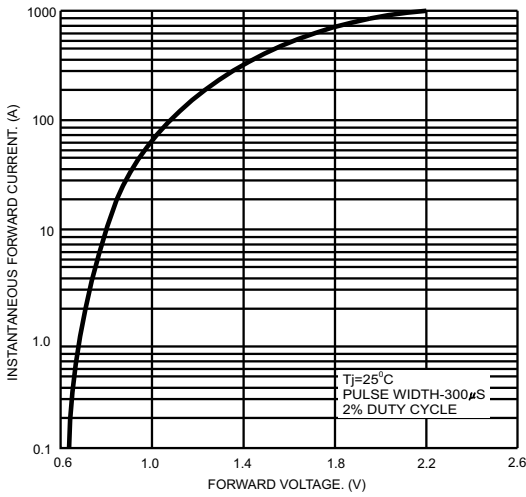


FIG.4-TYPICAL CAPACITANCE VS STAND-OFF VOLTAGE

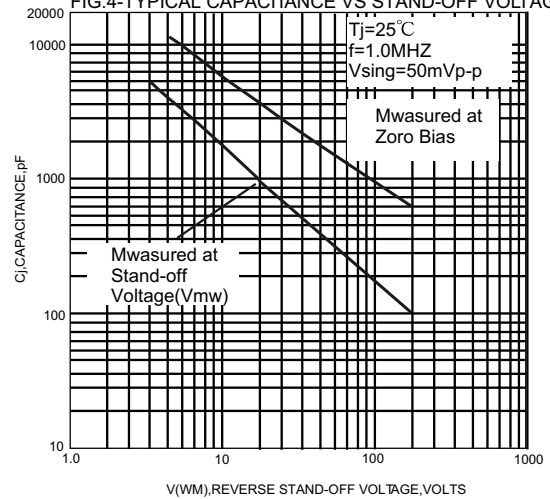


FIG.5-PULSE WAVEFORM

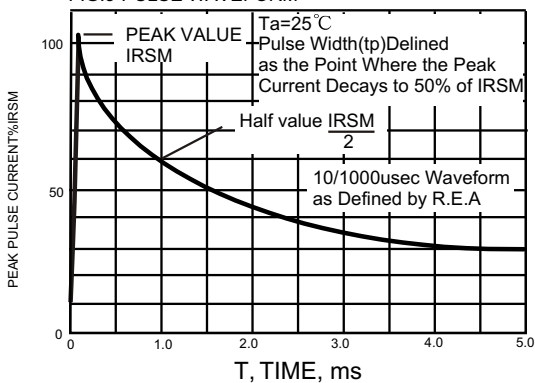


FIGURE .6- PULSE RATING CURVE

