



**DACO SEMICONDUCTOR CO., LTD.**

**AR(S)5001G  
THRU  
AR(S)5007G**

**AUTOMOTIVE GLASS PASSIVATED RECTIFIERS TYPE 50A**

**Features**

- High Surge Capability
- High Current Capability
- Types up to 1000V  $V_{RRM}$

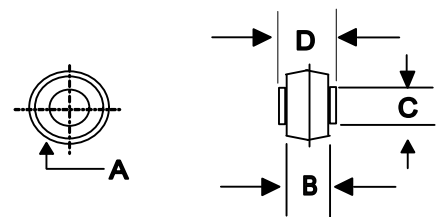
**50Amp  
BUTTON DIODE  
50-1000 Volts**

**Maximum Ratings**

Operating Temperature: -50°C to +215°C  
Storage Temperature: -50°C to +215°C

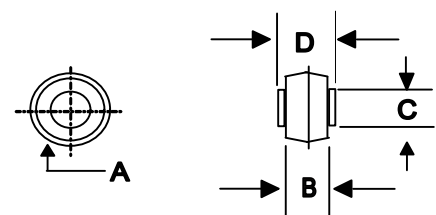
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
AR(S)5001G	50V	35V	50V
AR(S)5002G	100V	70V	100V
AR(S)5003G	200V	140V	200V
AR(S)5004G	400V	280V	400V
AR(S)5005G	600V	420V	600V
AR(S)5006G	800V	560V	800V
AR(S)5007G	1000V	700V	1000V

BUTTON-AR



DIMENSIONS					
DIM	INCHES		MM		NOTE
	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



DIMENSIONS					
DIM	INCHES		MM		NOTE
	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	

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

Average Forward Current	$I_{F(AV)}$	50 A	$T_C = 150^\circ C$
Peak Forward Surge Current	$I_{FSM}$	600A	8.3ms, Halfsine
Maximum Instantaneous Forward Voltage *	$V_F$	1.1V	$I_{FM} = 50A;$ $T_J = 25^\circ C$
Maximum Instantaneous DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 uA 200 uA	$T_J = 25^\circ C$ $T_J = 150^\circ C$
Maximum thermal resistance, junction to Ambient	$R_{\theta JA}$	1.0 °C /w	
Typical Junction Capacitance	$C_j$	300pF	Measured at 1.0MHz, $V_R = 4.0V$

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



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

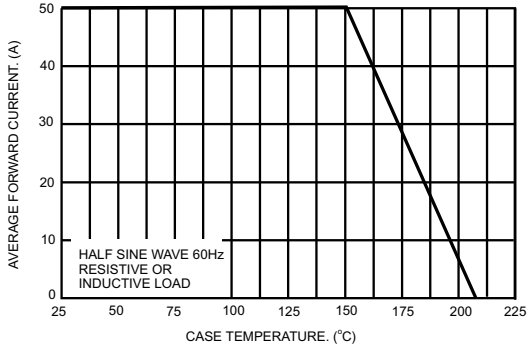


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

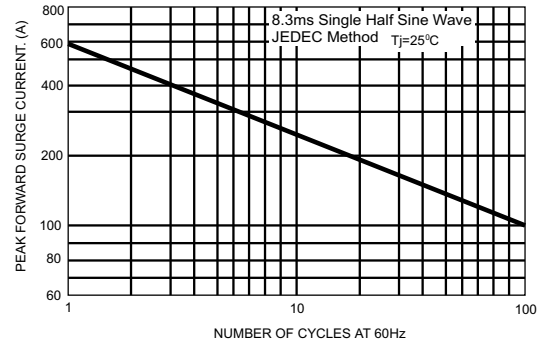


FIG.3- TYPICAL FORWARD CHARACTERISTICS

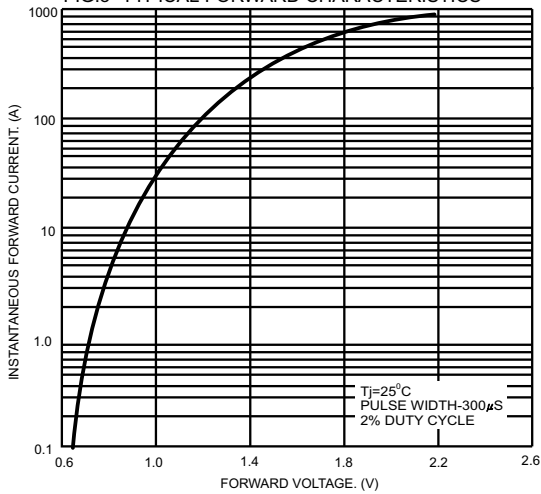


FIG.4- TYPICAL REVERSE CHARACTERISTICS

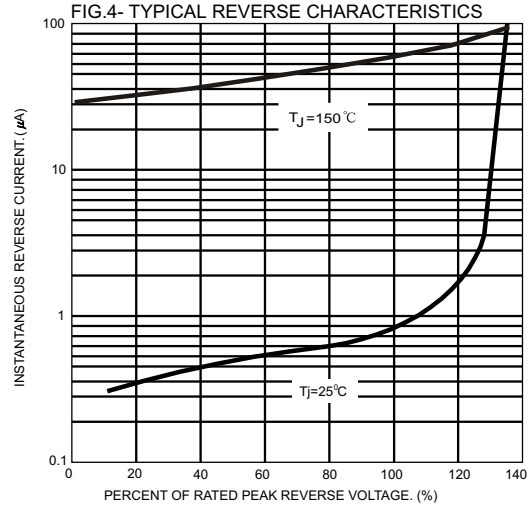


FIG.5- TYPICAL JUNCTION CAPACITANCE

