DACO SEMICONDUCTOR CO., LTD.

AR(S)2501 THRU AR(S)2507

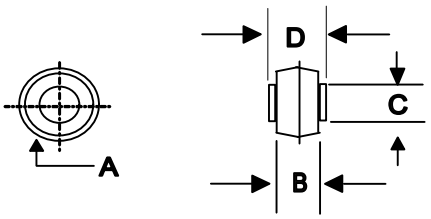
AUTOMOTIVE SILICON RECTIFIERS TYPE 25A

Features

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

25Amp
BUTTON DIODE
50-1000 Volts

BUTTON-AR



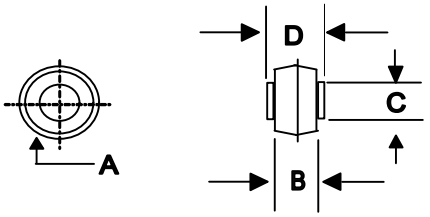
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.380	.410	9.7	10.4	
B	.165	.185	4.20	4.70	
C	.215	.225	5.50	5.70	
D	.235	.250	6.00	6.40	

Maximum Ratings

Operating Temperature: -50℃ to +190℃
Storage Temperature: -50℃ to +190℃

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage	Marking
AR(S)2501	50V	35V	50V	White
AR(S)2502	100V	70V	100V	Yellow
AR(S)2503	200V	140V	200V	Blue
AR(S)2504	400V	280V	400V	Silive
AR(S)2505	600V	420V	600V	Red
AR(S)2506	800V	560V	800V	Green
AR(S)2507	1000V	700V	1000V	Brown

BUTTON-ARS



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
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 ℃ Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25 A	T_C= 150℃
Peak Forward Surge Current	I_{FSM}	400A	8.3ms , Halfsine
Maximum Instantaneous Forward Voltage *	V_F	1.0V	I_{FM} = 25A; T_J = 25 ℃
Maximun Instanteous DC Reverse Current At Rated DC Blocking Voltage	I_R	10 uA 500 uA	T_J = 25 ℃ T_J = 150 ℃
Maximum thermal resistance, junction to Ambient	$R_{\theta}jA$	1.0 ℃ /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

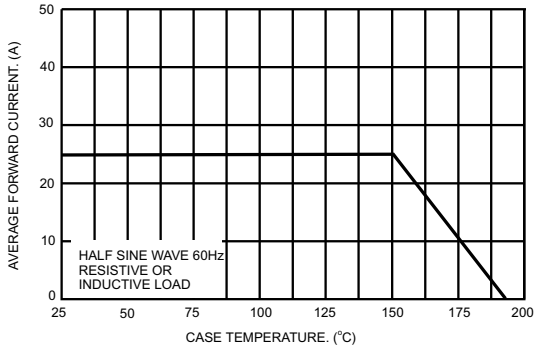


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

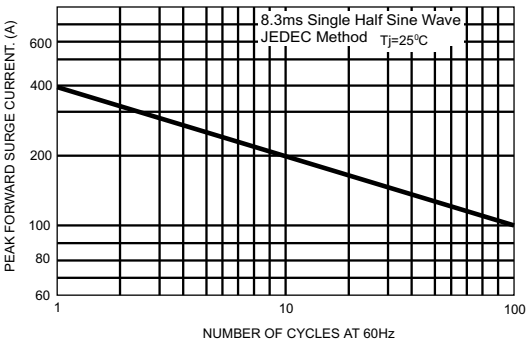


FIG.3- TYPICAL FORWARD CHARACTERISTICS

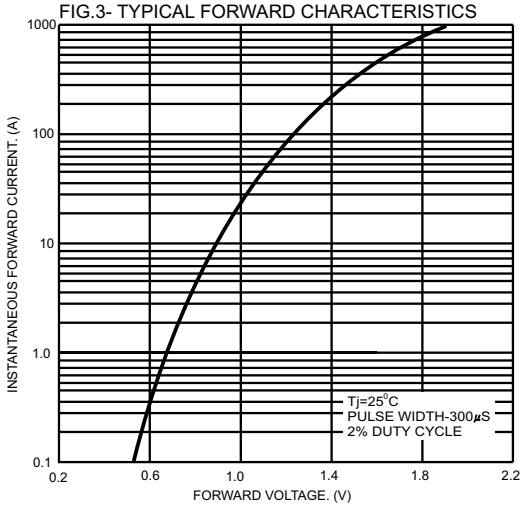


FIG.4- TYPICAL REVERSE CHARACTERISTICS

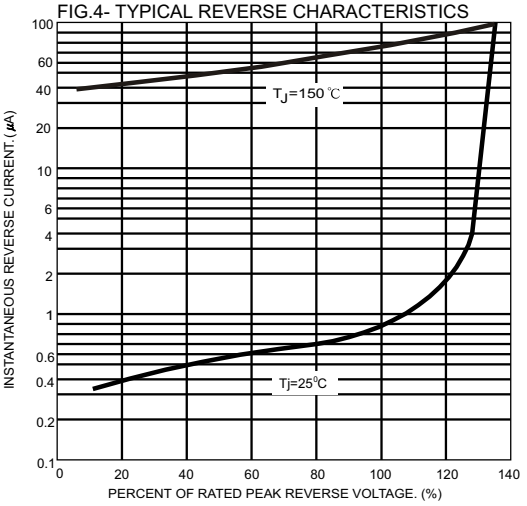


FIG.5- TYPICAL JUNCTION CAPACITANCE