



勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

# 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

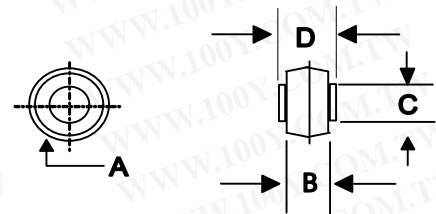
### Maximum Ratings

Operating Temperature:  $-50^{\circ}\text{C}$  to  $+190^{\circ}\text{C}$   
 Storage Temperature:  $-50^{\circ}\text{C}$  to  $+190^{\circ}\text{C}$

25Amp  
 BUTTON DIODE  
 50-1000 Volts

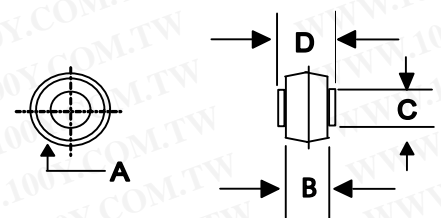
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage	Marking
AR(S)2501	50V	35V	50V	White
AR(S)2502	100V	70V	100V	Yellow
AR(S)2503	200V	140V	200V	Blue
AR(S)2504	400V	280V	400V	Silive
AR(S)2505	600V	420V	600V	Red
AR(S)2506	800V	560V	800V	Green
AR(S)2507	1000V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

BUTTON-AR



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



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	$I_{F(AV)}$	25 A	$T_C = 150^{\circ}\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, Halfsine
Maximum Instantaneous Forward Voltage *	$V_F$	1.0V	$I_{FM} = 25A;$ $T_J = 25^{\circ}\text{C}$
Maximum Instantaneous DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Maximum thermal resistance, junction to Ambient	$R_{\theta JA}$	1.0 $^{\circ}\text{C}/\text{w}$	
Typical Junction Capacitance	$C_j$	300pF	Measured at 1.0MHz, $V_R = 4.0V$

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



勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

# AR(S)2501 THRU AR(S)2507

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

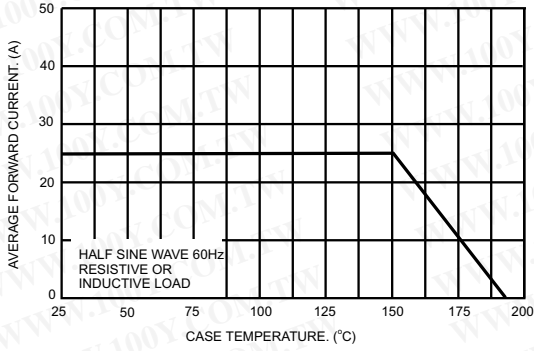


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

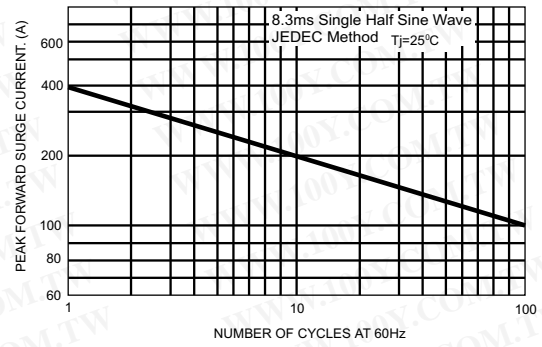


FIG.3- TYPICAL FORWARD CHARACTERISTICS

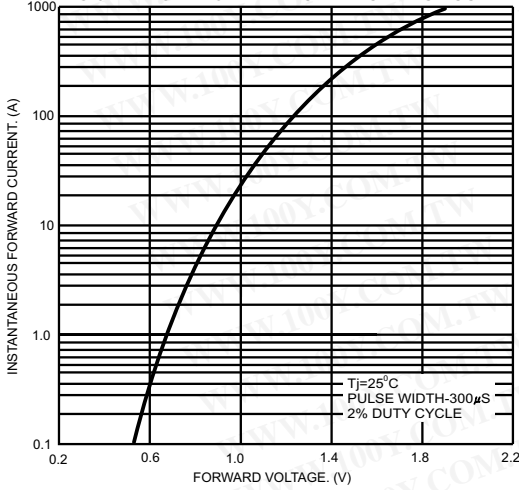


FIG.4- TYPICAL REVERSE CHARACTERISTICS

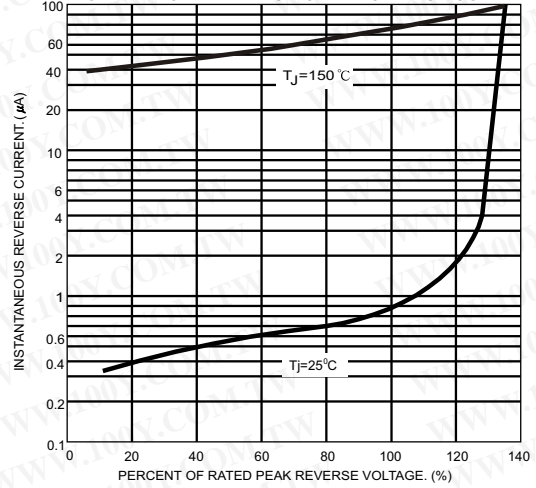


FIG.5- TYPICAL JUNCTION CAPACITANCE

