



AR5005 THRU AR5010 50A, 50-1200V AUTOMOTIVE BUTTON DIODE

FEATURES

- . High surge capability
- . High current capability
- . Low leakage

High temperature soldering guaranteed : 250°C for 10 seconds

MECHANICAL DATA

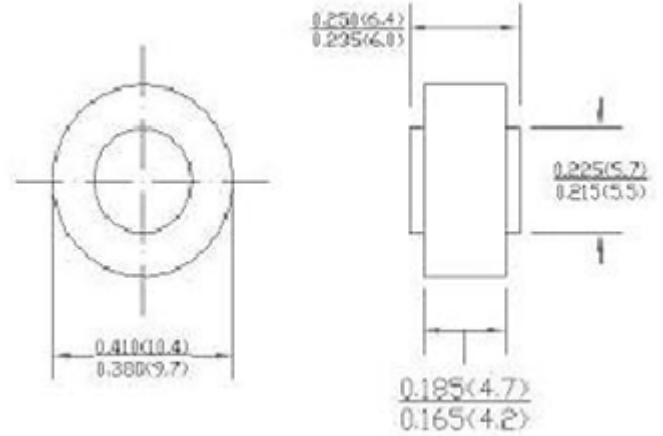
Case : Molded plastic case

Terminals : Plated terminals, solderable per MIL-STD-202, method 208

Polarity : Color band denotes cathode end

Mounting Position: Any

Weight: 1.8 grams



CASE:RA OR AR

Dimension in inches (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. unless otherwise specified.

Single phase, half sine wave, 60HZ, resistive or inductive load.

	SYMBOL	AR/RA							UNIT
		5005	501	502	504	506	508	5010	S
Maximum recurrent reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Tc=125°C	I(AV)	50.0							Amps
Peak forward surge current single sine-wave on rated load (JEDEC Method)	IFSM	500							Amps
Maximum instantaneous forward voltage drop at 50A	VF	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage TA=125°C	IR	5.0 200.0							μA
Typical thermal resistance	RθJA	1.0							°C/W
Typical junction capacitance	CJ	300							pF
Operating and Storage Temperature Range	TJ TSTG	-55 TO +150							°C

RATING CHARACTERISTIC CURVES AR/RA5005 THRU R/RA5010

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

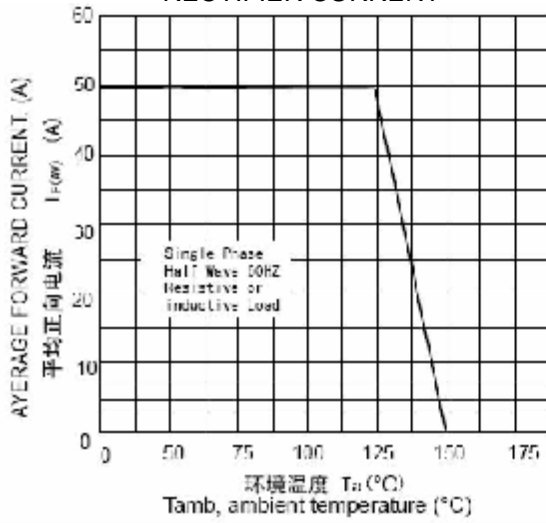


FIG. 2 – MAXIMUM NON – REPETITIVE PEAK FORWARD SURGE CURRENT

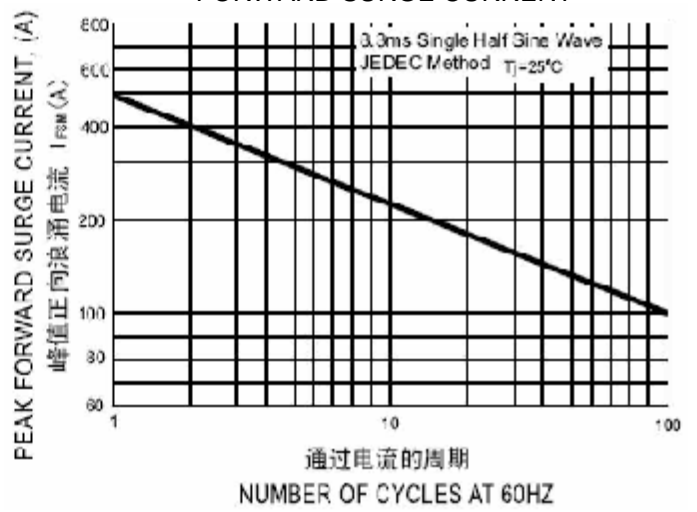


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

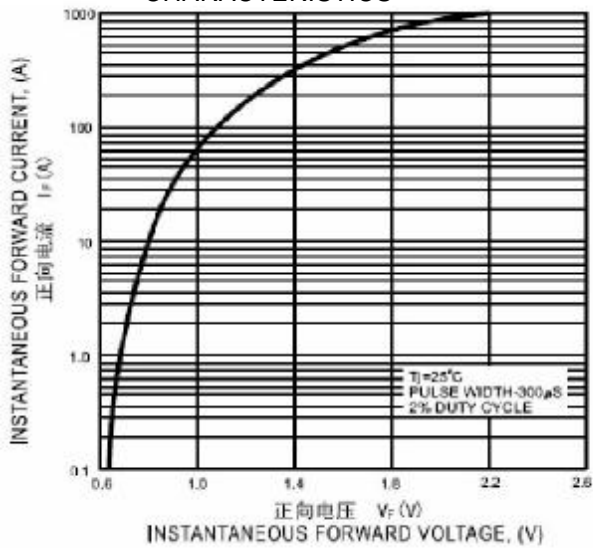


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

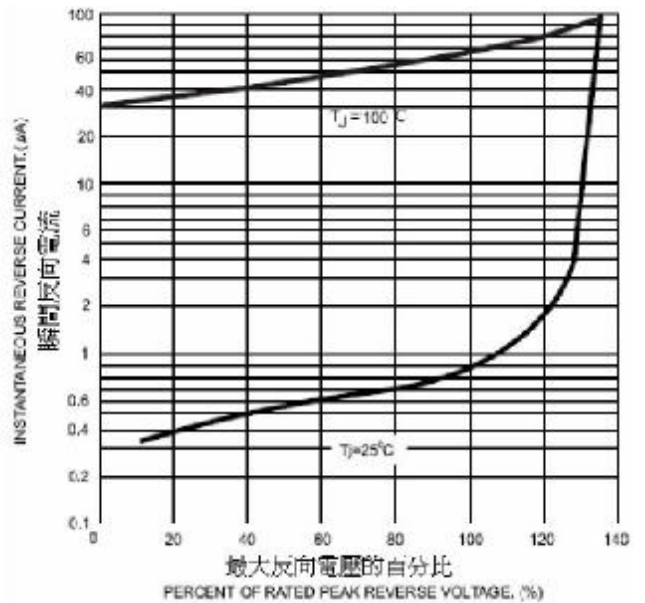


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

