

50 AMP HIGH FREQUENCY SOFT RECOVERY BUTTON DIODES

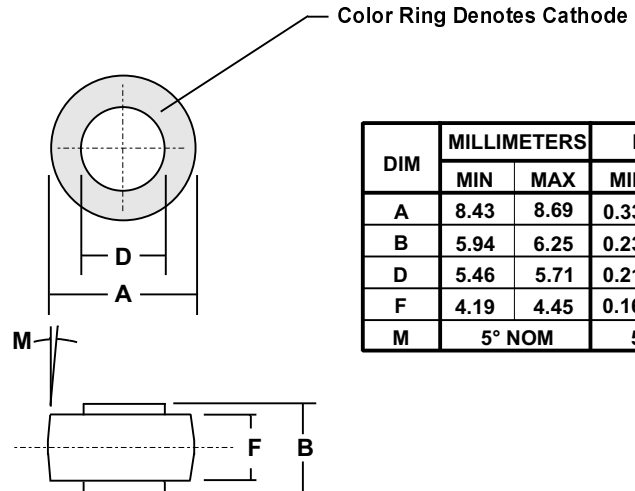
FEATURES

- TRUE SOFT RECOVERY CHARACTERISTIC WITH NO RINGING, SPIKES, or OVERSHOOT
- HIGH FREQUENCY: 250 kHz
FAST RECOVERY: 100nS - 150nS
- UNMATCHED PERFORMANCE - Minimal RFI/EMI, Reduced Power Losses, Extremely Cool Operation Increased Power Supply Efficiency
- VOID FREE Vacuum Die Soldering For Maximum Mechanical Strength And Heat Dissipation (Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- Proprietary *SOFT GLASS* Junction Passivation For Superior Reliability and Performance
- Wide Range of Applications - Inverters, Converters Choppers, Power Supplies, etc.

MECHANICAL DATA

- Case: Molded epoxy, U/L Flammability Rating 94V-0
- Finish: All external surfaces are corrosion resistant and the contact areas are readily solderable
- Soldering Temperature: 250 °C maximum
- Mounting Position: Any
- Polarity: Color band denotes cathode
- Weight: 0.6 Ounces (1.8 Grams)

MECHANICAL SPECIFICATION



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	8.43	8.69	0.332	0.342
B	5.94	6.25	0.234	0.246
D	5.46	5.71	0.215	0.225
F	4.19	4.45	0.165	0.175
M	5° NOM		5° NOM	

DIE SIZE: 0.180" x 0.180" SQUARE

RoHS COMPLIANT

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		SRP 5000S	SRP 5001S	SRP 5002S	SRP 5004S	SRP 5006S	
Series Number							
Maximum DC Blocking Voltage	V _{RM}	50	100	200	400	600	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	
Maximum Peak Recurrent Reverse Voltage	V _{RIRM}	50	100	200	400	600	
Average Forward Rectified Current	I _o	50					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I _{FSM}	720					
Maximum Forward Voltage at 35 Amps DC	V _{FM}	1.2 (Typical 1.1)					VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage	I _{RM}	1.0 50					μA
Typical Thermal Resistance, Junction to Case	R _{θJC}	0.8					°C/W
Maximum Reverse Recovery Time - Soft Recovery	T _{RR}	150 (Typ. 100)					nSec
Junction Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150					°C

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