

75 AMP SOFT RECOVERY FAST SWITCHING LEAD MOUNT BUTTON DIODES

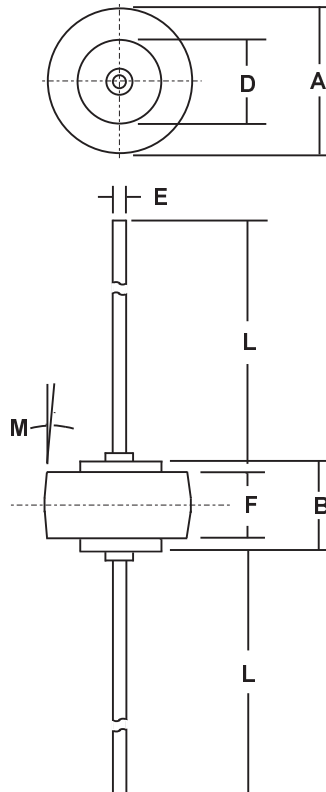
FEATURES

- IDEALLY SUITED FOR ELECTRIC VEHICLE MOTOR CONTROL APPLICATIONS
- HIGH FREQUENCY: 250 kHz
FAST RECOVERY: Typical 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 Junction Passivation For Superior Reliability and Performance
- Wide Range of Applications: Motor Speed Controllers, Inverters, Converters, Choppers, Power Supplies, etc.

MECHANICAL DATA

- Case: Molded Epoxy (UL Flammability Rating 94V-O)
- Finish: All external surfaces are corrosion resistant and the contact areas are readily solderable
- Maximum Lead Soldering Temperature: 220 °C, 3/8" from case for 10 seconds at 5 lbs tension
- Mounting Position: Any
- Polarity: Color band or diode symbol on case
- Weight: 0.09 Ounces (2.6 Grams)

MECHANICAL SPECIFICATION



DIE SIZE: 0.250" ROUND
Largest Die Available
In The Industry

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
E	1.27	1.35	0.050	0.053
F	4.19	4.45	0.165	0.175
L	25.15	25.65	0.990	1.010
M	5° NOM		5° NOM	

RoHS COMPLIANT

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		SRL 7500	SRL 7501	SRL 7502	SRL 7504	SRL 7506	
Series Number							
Maximum DC Blocking Voltage	VRM	50	100	200	400	600	VOLTS
Maximum RMS Voltage	VRMS	35	70	140	280	420	
Maximum Peak Recurrent Reverse Voltage	VRRM	50	100	200	400	600	
Average Forward Rectified Current	Io	75					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	IfSM	800					
Maximum Forward Voltage at 75 Amps DC	VFM	1.40 (Typical 1.23)					VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage	IRM	1.0 50					μA
Typical Thermal Resistance, Junction to Case (Note 1)	RθJC	0.8					°C/W
Maximum Reverse Recovery Time	TRR	150 (Typ. 100)					nSec
Junction Operating and Storage Temperature Range	TJ, TSTG	-65 to +175					°C

Notes: 1) Both Leads to Heatsink, Equal Length