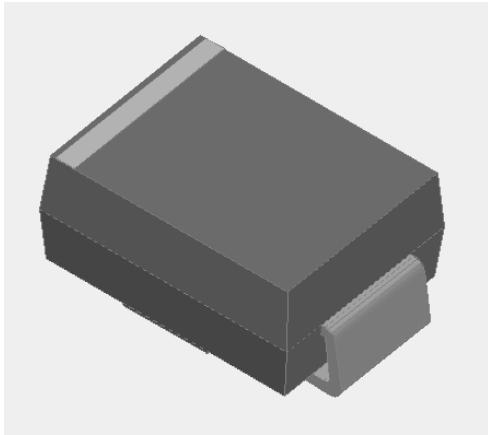


## Surface Mount Fast Recovery Rectifier

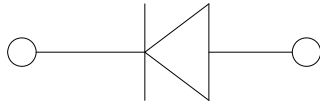


### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewhy



### Mechanical Data

- Package:** DO-214AA (SMB)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity:** Cathode line denotes the cathode end

### Maximum Ratings ( $T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M
Device marking code			GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	14		VDC □	V	50 / 10

	FSM	A	50
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25$			100
Current squared time @1ms t 82 Storage temperature	Tstg		-55 ~ +150
Junction temperature	$T_j$		-55 ~ +150



# GR2A THRU GR2M

## Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M
Maximum instantaneous forward voltage	V <sub>F</sub>	V	I <sub>FM</sub> =2.0A	1.3						
Maximum reverse recovery time	t <sub>r</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>r</sub> =0.25A	150				250	500	
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	μA	T <sub>j</sub> =25	5.0						
			T <sub>j</sub> =125	100						
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	18				11		

## Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	GR2A	GR2B	GR2D	GR2G	GR2J	GR2K	GR2M
Typical Thermal Resistance	R J-A(1)	/W	60						
	R J-L(1)		20						
	R J-C(1)		18						

Note:  
 (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

## Characteristics (Typical)

FIG2: Surge Forward Current Capability

Peak Forward Surge Current(A)

8.3ms Single Half Sine Wave

1

10  
Number of Cycles

100



## Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GR2A-GR2M	F1	Approximate 0.096	3000	/	48000	13" reel
GR2A-GR2M	F2	Approximate 0.096	750	6000	24000	7" reel

**GR2A THRU GR2M**



Disclaimer