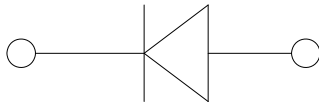
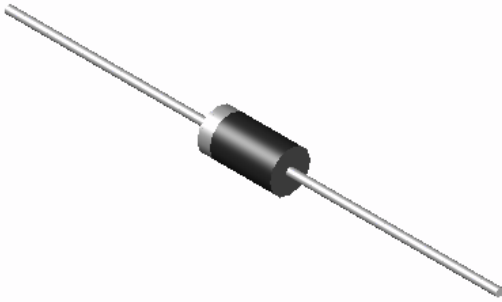




Fast Recovery Rectifier



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Mechanical Data

- **Package:** DO-201AD(DO-27)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■Maximum Ratings (Ta=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FR501G	FR502G	FR503G	FR504G	FR505G	FR506G	FR507G
Device marking code			FR501G	FR502G	FR503G	FR504G	FR505G	FR506G	FR507G
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta=50	I _{F(AV)}	A	5.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I _{FSM}	A	200						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			400						
Current squared time @1ms≤t≤8.3ms Tj=25 Rating of per diode	I ² t	A ² s	166						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	70				56		
Storage Temperature	T _{stg}		-55 ~ +150						
Junction Temperature	T _j		-55 ~ +150						

Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	150	250	500	



FR501G THRU FR507G

■ Thermal Characteristics $T_a=25$ Unless otherwise specified

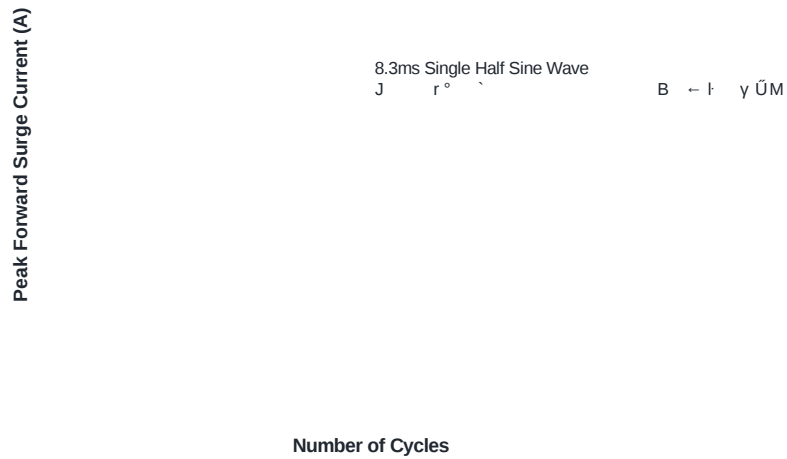
PARAMETER	SYMBOL	UNIT	FR501G	FR502G	FR503G	FR504G	FR505G	FR506G	FR507G
Typical Thermal Resistance	$R_{\theta JA}$	/W	18						

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
FR501G~FR507G	D1	Approximate 1.05	1250	1250	12500	Tape
FR501G~FR507G	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics (Typical)

FIG.2: Forward Surge Current Capability





■ Outline Dimensions

DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30

FR501G THRU FR507G
