

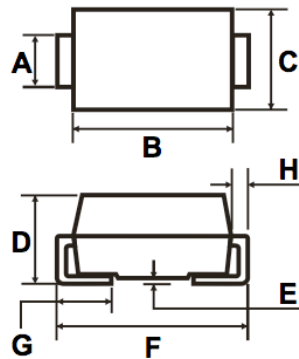
Ultra Fast Power Rectifier SUF205A

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Super Fast switching speed under 35ns

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.063 grams



	Dimensions in Millimeters		Dimensions in Inches	
	A	1.25	1.65	0.049
B	3.99	4.60	0.157	0.181
C	2.50	2.90	0.098	0.114
D	1.98	2.44	0.078	0.096
E	0.051	0.203	0.002	0.008
F	4.78	5.28	0.188	0.208
G	0.76	1.52	0.030	0.060
H	0.152	0.305	0.006	0.012

SMA



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SUF205A	Unit
Maximum repetitive peak reverse voltage	VRRM	600	V
Maximum RMS Voltage	VRMS	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified current Total device	IF(AV)	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50	A
Operating junction temperature range	TJ	-55 to +175	°C
Storage temperature range	TSTG	-55 to +175	°C

Electrical characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=5A, Tj=25°C	VF	1.5	1.7	V
Maximum reverse current per leg at working peak reverse voltage Tj=100°C	IR	5		u'A
		80		m'A
Maximum Reverse Recovery Time	Trr	35		ns
Typical Junction Capacitance (Note)		15		pF

Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJA	75	°C/W
	Rthjl	20	

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted FR-4 PCB 0.013mm