

# Kingtronics®

M20

SURFACE MOUNT GENERAL RECTIFIER

## FEATURE

The plastic package carries Underwriters Laboratory  
Flammability Classification 94V-0  
For surface mounted applications  
Low reverse leakage  
Built-in strain relief, ideal for automated placement  
High forward surge current capability  
High temperature soldering guaranteed:  
250 C/10 seconds at terminals

## Mechanical Data

Case: JEDEC SMA-J molded plastic body Terminals: Solder  
plated, solderable per MIL-STD-750, Method 2026  
Polarity: Color band denotes cathode end  
Mounting Position: Any  
Weight: 0.083 grams

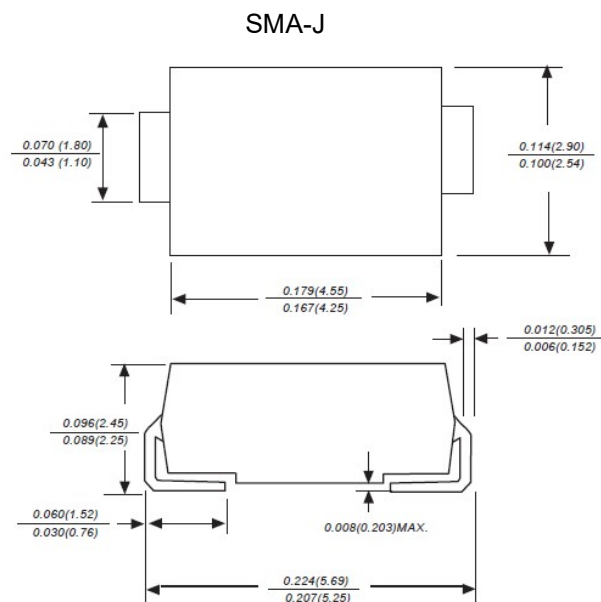
## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Reverse Voltage - 2000 Volts Forward Current - 1.0 Ampere Amperes



Dimensions in inches and (millimeters)

CHARACTERISTICS	Symbols	M20	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	2000	Volts
Maximum RMS voltage	$V_{RMS}$	1400	Volts
Maximum DC blocking voltage	$V_{DC}$	2000	Volts
Maximum average forward rectified current at $T_L=110\text{ }^{\circ}\text{C}$	$I_{(AV)}$	0.5	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25	Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.1	V
Maximum DC reverse current @ $T_A=25\text{ }^{\circ}\text{C}$ at rated DC blocking voltage @ $T_A=100\text{ }^{\circ}\text{C}$	$I_R$	5.0 50.0	$\mu\text{A}$
Typical junction capacitance per element (Note 1 )	$C_J$	15	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75	$^{\circ}\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	(-55 to +150)	$^{\circ}\text{C}$

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

**Kingtronics® International Company**

Website: [www.kingtronics.com](http://www.kingtronics.com)

Email: [info@kingtronics.com](mailto:info@kingtronics.com)

Tel: (852) 8106 7033

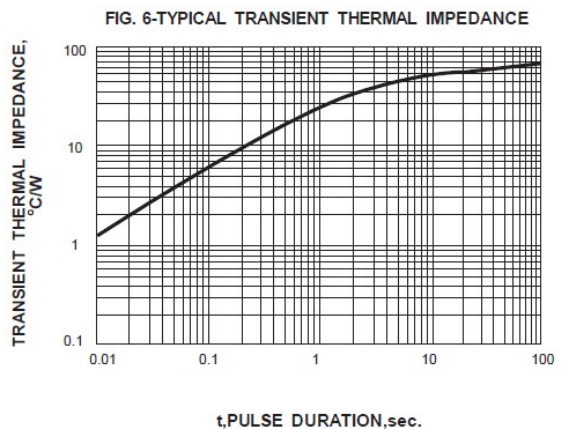
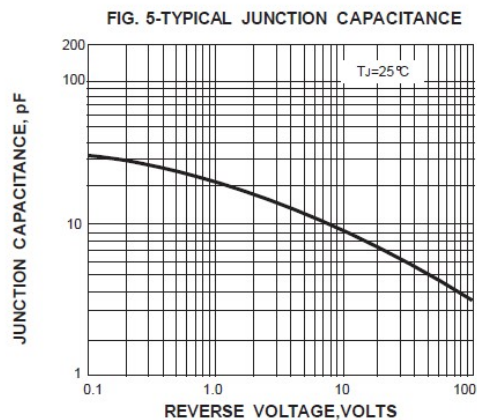
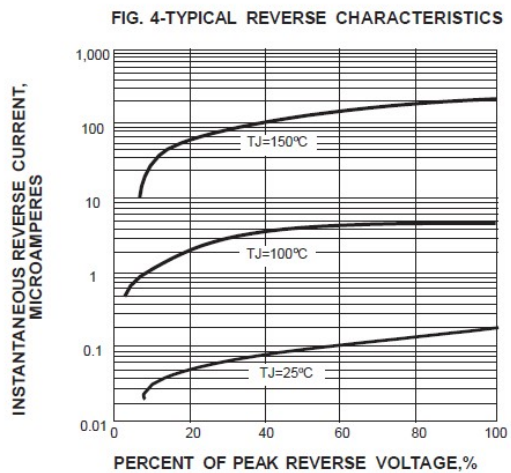
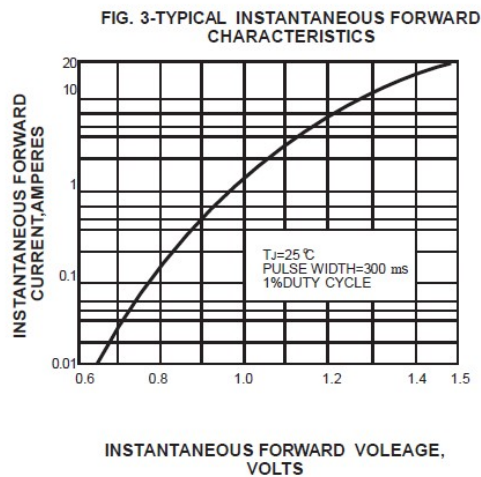
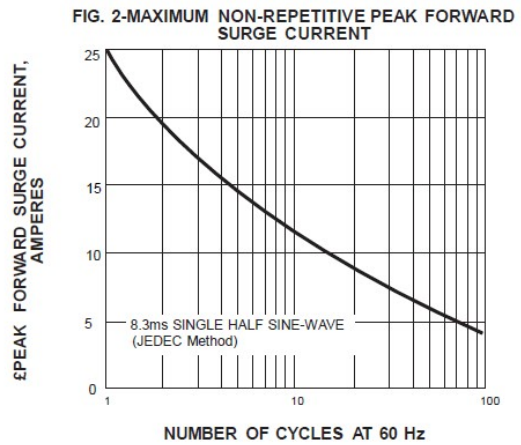
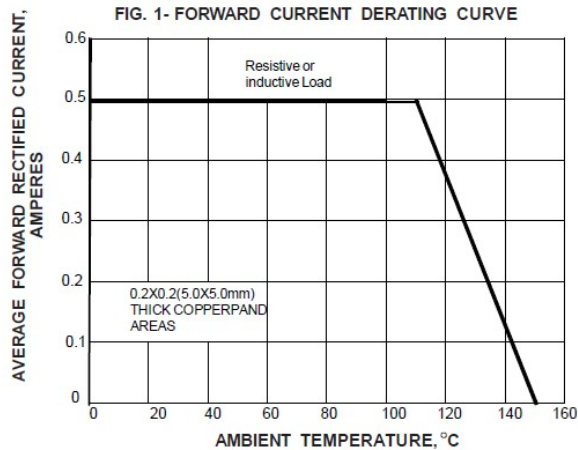
Fax: (852) 8106 7099

# Kingtronics®

M20

SURFACE MOUNT GENERAL RECTIFIER

## RATINGS AND CHARACTERISTIC CURVES M20



**Kingtronics® International Company**