



S2M

DIODE

2.0A SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

DESCRIPTION

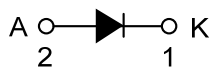
The UTC **S2M** is a surface mount general rectifier, it uses UTC's advanced technology to provide customers with high forward surge current and low reverse leakage, etc.

The UTC **S2M** is suitable for surface mounted applications.

FEATURES

- * For surface mounted applications
- * Low reverse leakage
- * Built-in strain relief, ideal for automated placement
- * Low reverse leakage
- * High forward surge current capability
- * Glass passivated chip junction

SYMBOL



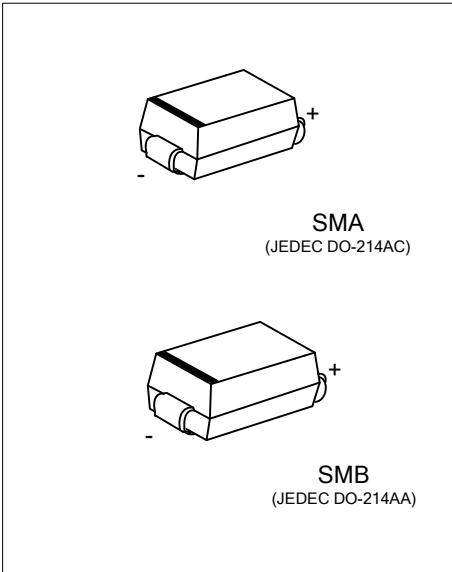
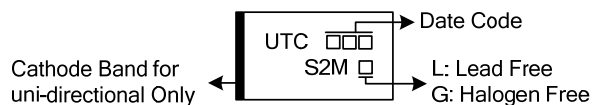
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
S2ML-SMA-R	S2MG-SMA-R	SMA	K	A	Tape Reel
S2ML-SMB-R	S2MG-SMB-R	SMB	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>S2MG-SMA-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) SMA: SMA, SMB: SMB (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
RMS Voltage	V_{RMS}	700	V
DC Blocking Voltage	V_{DC}	1000	V
Average Forward Rectified Current at $T_L=75^\circ\text{C}$	$I_{(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Junction Temperature	T_J	-65 ~ +175	°C
Storage Temperature	T_{STG}	-65 ~ +175	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	75	°C/W

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

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

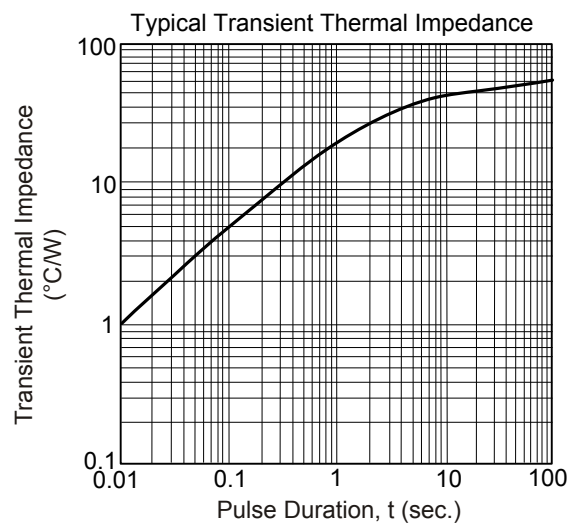
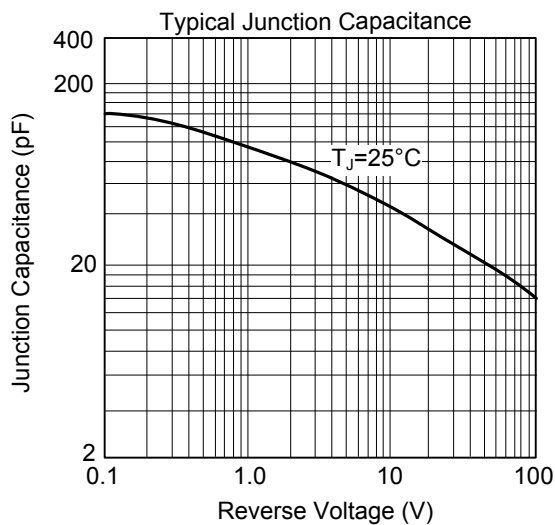
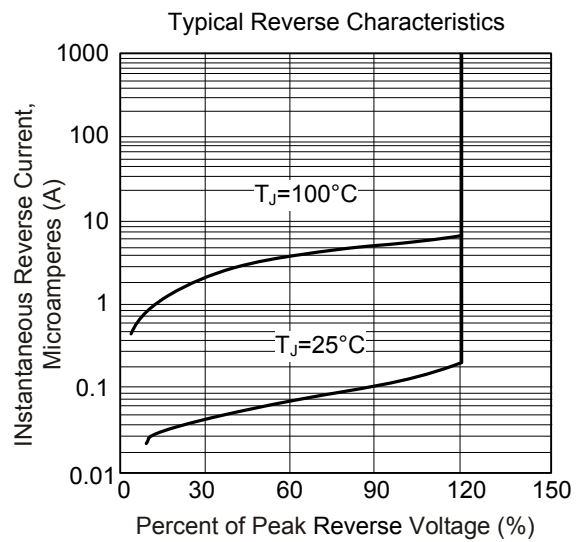
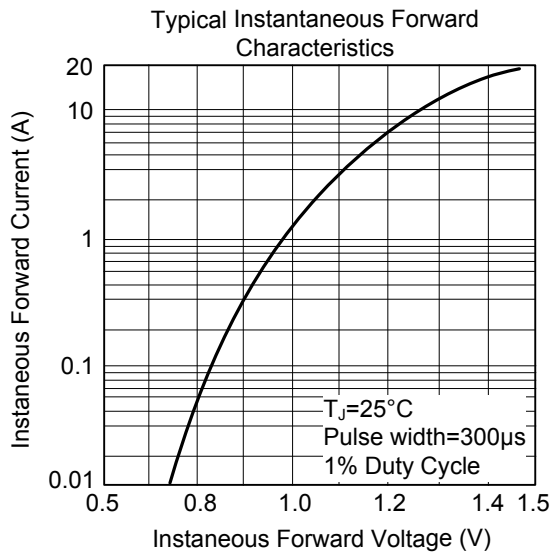
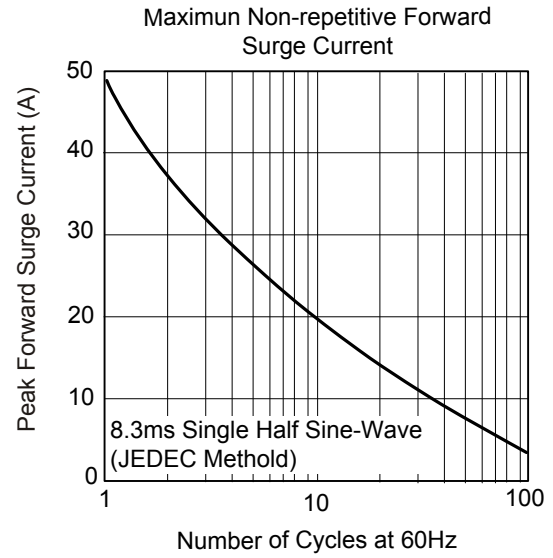
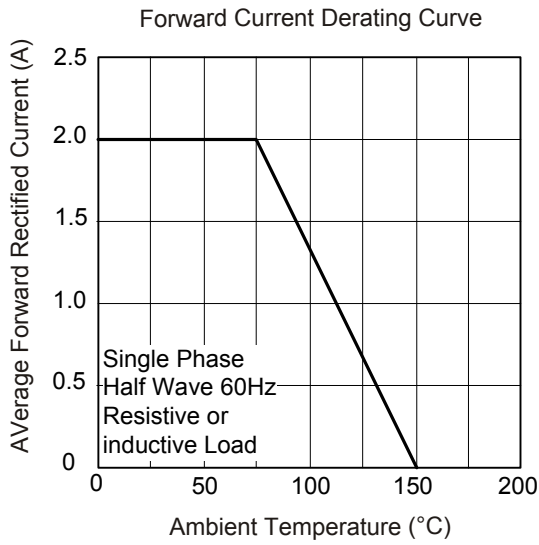
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_F	$I_F=2.0A$			1.1	V
DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$			5	μA
		$T_A=100^\circ\text{C}$			50	μA
Junction Capacitance (Note 1)	C_J			15		pF
Reverse Recovery Time (Note 2)	t_{rr}			2000		ns

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

2. Reverse recovery condition $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$.

■ TYPICAL CHARACTERISTICS



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