

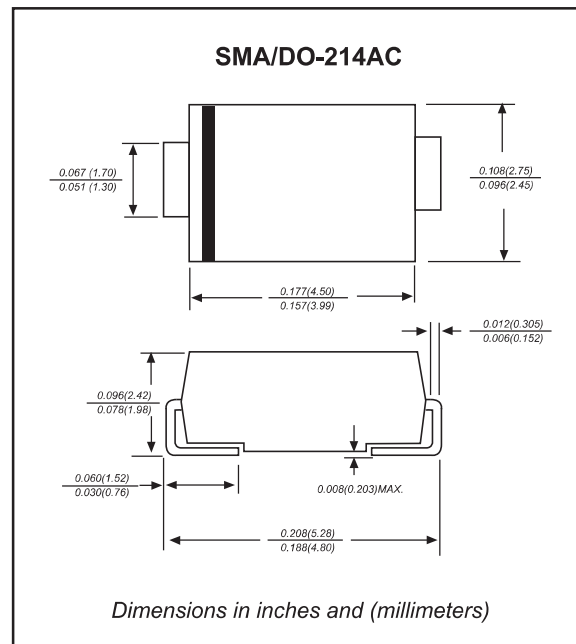
Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ For surface mounted applications
- ▶ Ultra fast switching for high efficiency
- ▶ Low reverse leakage
- ▶ Built-in strain relief, ideal for automated placement
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed 260 C/10 seconds at terminals
- ▶ Glass passivated chip junction
- ▶ Compliant to Halogen-free

Mechanical data

- ▶ **Case:** JEDEC SMA/DO-214AC molded plastic body
- ▶ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ▶ **Polarity:** Color band denotes cathode end
- ▶ **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics

Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive peak reverse voltage	1200	V
$V_{(RMS)}$	Voltage rms	850	V
$I_{F(AV)}$	Average forward current $T_J = 115^\circ\text{C}$ $\delta = 0.5$	1	A
I_{FSM}	Forward surge current $t = 8.3$ ms	50	A
T_{stg}	Storage temperature range	- 50 + 175	$^\circ\text{C}$
T_J	Maximum operating junction temperature	+ 175	$^\circ\text{C}$
$R_{th(j-l)}$	Junction to lead	30	$^\circ\text{C/W}$

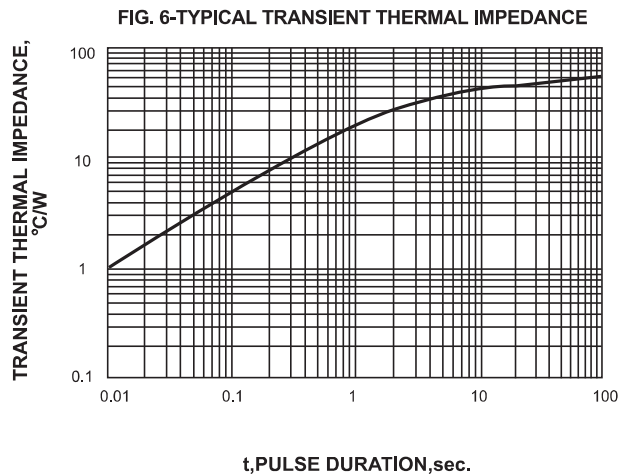
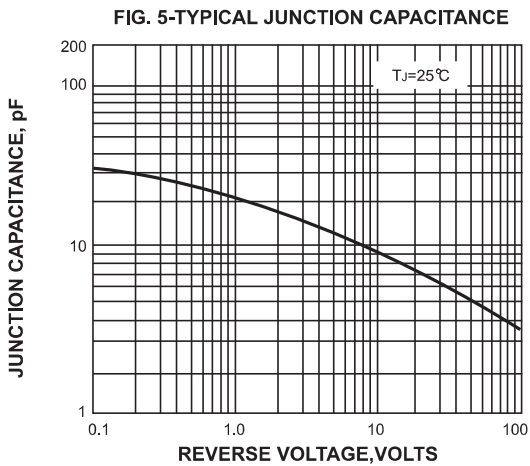
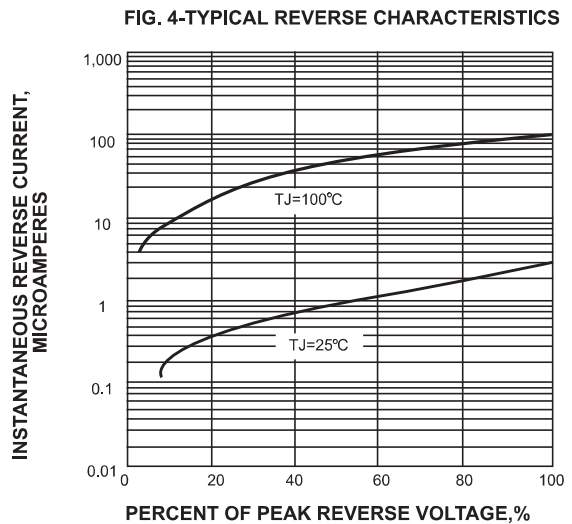
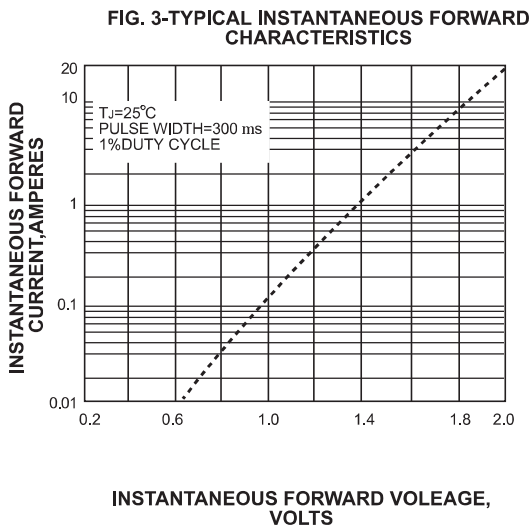
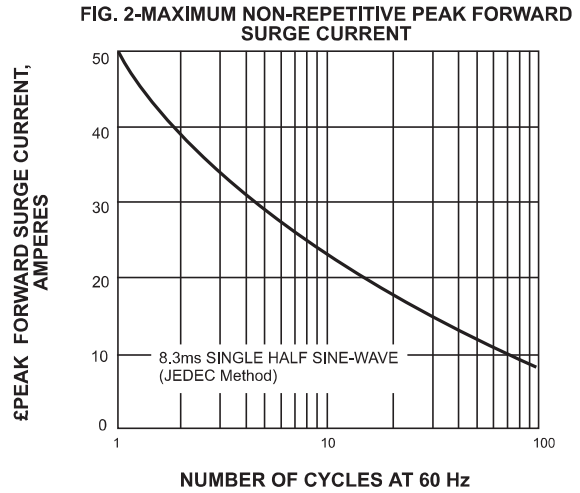
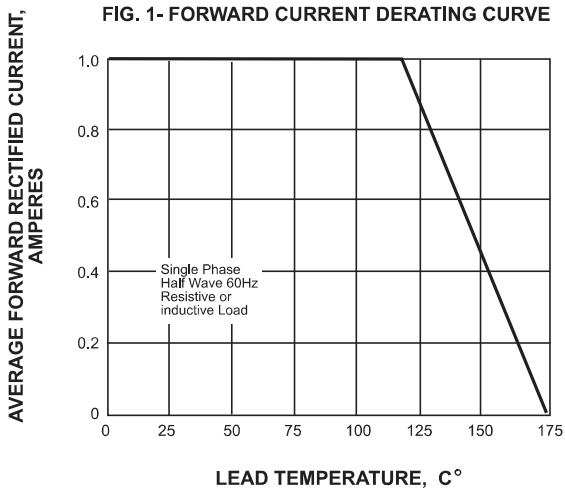
Static electrical characteristics

Symbol	Parameter	Tests conditions	Min.	Typ.	Max.	Unit
I_R	Reverse leakage current	$V_R = 1200$ V	$T_J = 25^\circ\text{C}$		5	μA
			$T_J = 125^\circ\text{C}$		50	
V_F	Forward voltage drop	$I_F = 1$ A	$T_J = 25^\circ\text{C}$		1.9	V
			$T_J = 125^\circ\text{C}$	1.17	1.65	
			$T_J = 150^\circ\text{C}$	1.10	1.55	

Dynamic electrical characteristics

Symbol	Parameter	Tests conditions	Min.	Typ.	Max.	Unit
t_{rr}	Reverse recovery time	$I_F = 0.5$ A $I_{rr} = 0.25$ A $I_R = 1$ A			75	ns
t_{fr}	Forward recovery time	$I_F = 1$ A $dI_F/dt = 50$ A/ μs			500	ns
V_{FR}	Forward recovery voltage	$V_{FR} = 1.1 \times V_{Fmax}$			30	V

Rating and characteristic curves



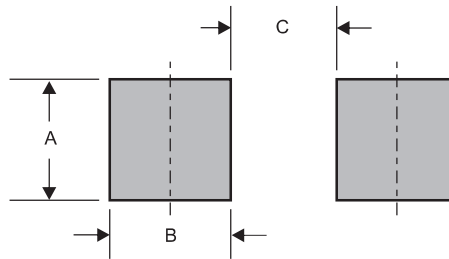
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example
STTH112A	H12	

Suggested solder pad layout

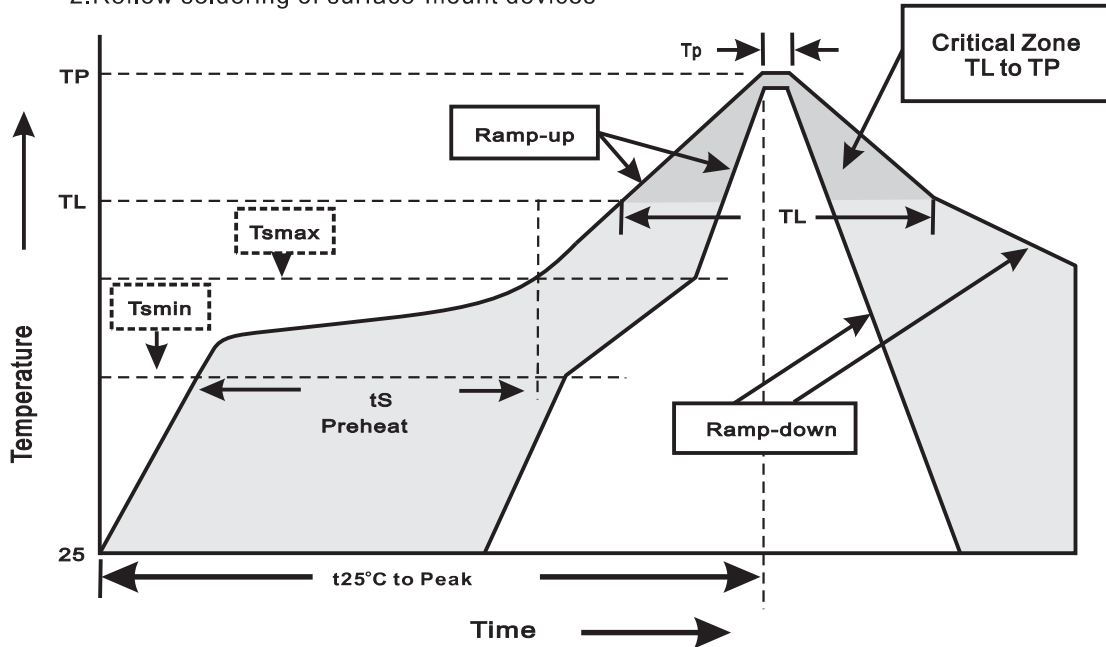


Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)

Suggested thermal profiles for soldering processes

- 1.Storage environment: Temperature=5°C~40°C Humidity=55%±25%
- 2.Reflow soldering of surface-mount devices



3.Reflow soldering

Profile Feature	Soldering Condition
Average ramp-up rate(TL to TP)	<3°C/sec
Preheat -Temperature Min(Tsmin) -Temperature Max(Tsmax) -Time(min to max)(ts)	150°C 200°C 60~120sec
Tsmax to TL -Ramp-upRate	<3°C/sec
Time maintained above: -Temperature(TL) -Time(tL)	217°C 60~260sec
Peak Temperature(TP)	255°C-0/+5°C
Time within 5°C of actual Peak Temperature(tp)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Rectifiers](#) category:

Click to view products by [FUXINSEMI](#) manufacturer:

Other Similar products are found below :

[70HFR40](#) [FR105 R0](#) [RL252-TP](#) [1N5397](#) [1N4005-TR](#) [1N4007-BP](#) [UFS120Je3/TR13](#) [20ETS12S](#) [RRE02VS6SGTR](#) [MS306](#) [A1N5404G-G](#)
[CRF02\(T5L,TEMQ\)](#) [ACGRB207-HF](#) [CLH07\(TE16L,Q\)](#) [CLH03\(TE16L,Q\)](#) [1N5395-TP](#) [UES1302](#) [ACGRC307-HF](#) [ACEFC304-HF](#) [DZ-](#)
[1380](#) [85HFR60](#) [40HFR60](#) [70HF120](#) [85HFR80](#) [SCF7500](#) [SM100](#) [ACGRA4001-HF](#) [SKN70/08](#) [NTE5819](#) [NTE5827](#) [NTE5828](#) [NTE5911](#)
[NTE5915](#) [NTE6104](#) [NTE6163](#) [NTE6164](#) [NTE6165](#) [NTE6364](#) [TSD3G](#) [SET130312](#) [NRVUS110VT3G](#) [UES1106](#) [UES1306](#)
[NRVUS240VT3G](#) [D5FE60-5063](#) [R4000GPS-TP](#) [D4015L56TP](#) [UES1306HR2](#) [FX20K120](#) [D20XB60-7101](#)