

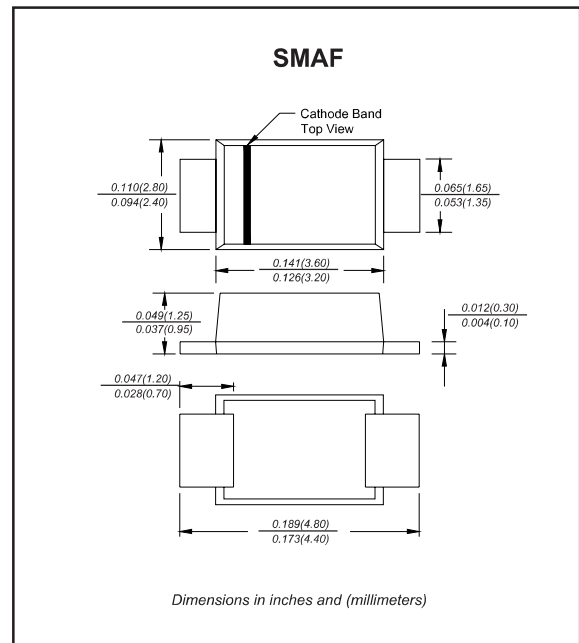
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals
- Compliant to RoHS Directive 2011/65/EU
- Compliant to Halogen-free

Mechanical data

- **Case:** JEDEC SMAF 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 (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			2.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM} \quad T_A = 25^{\circ}\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM} \quad T_A = 100^{\circ}\text{C}$				20	
Thermal resistance	Junction to ambient NOTE 1	$R_{\theta JA}$		70		$^{\circ}\text{C/W}$
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		220		pF
Storage temperature		T_{STG}	-65		+150	$^{\circ}\text{C}$

Note: 1.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , (°C)	
SL22-F	20	14	20	0.45	-55 to +125	
SL23-F	30	21	30			
SL24-F	40	28	40			
SL25-F	50	35	50	0.55	-55 to +150	
SL26-F	60	42	60			
SL28-F	80	56	80	0.75		
SL210-F	100	70	100			
SL215-F	150	105	150	0.85		
SL220-F	200	140	200			

*1 Repetitive peak reverse voltage

*2 RMS voltage

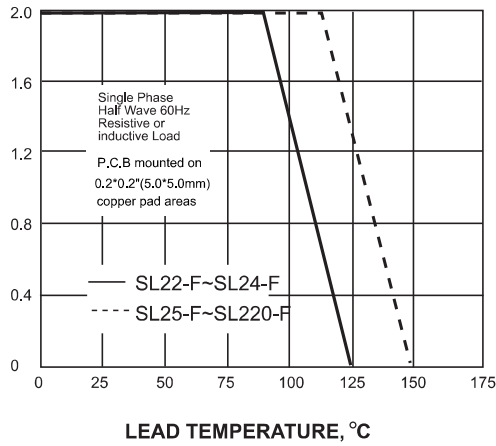
*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=2.0\text{A}$

Rating and characteristic curves

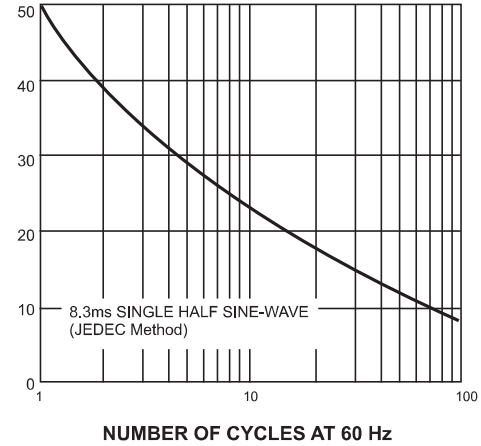
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



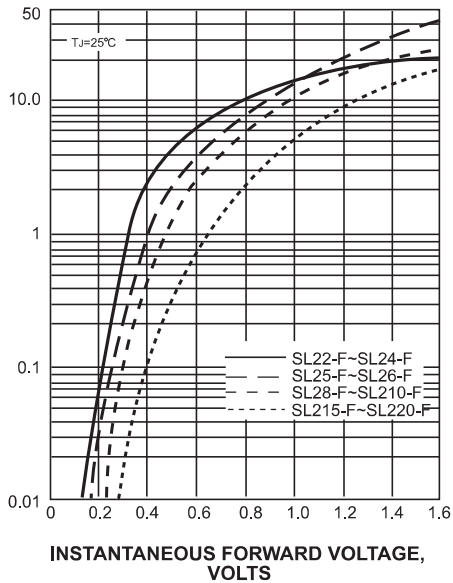
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



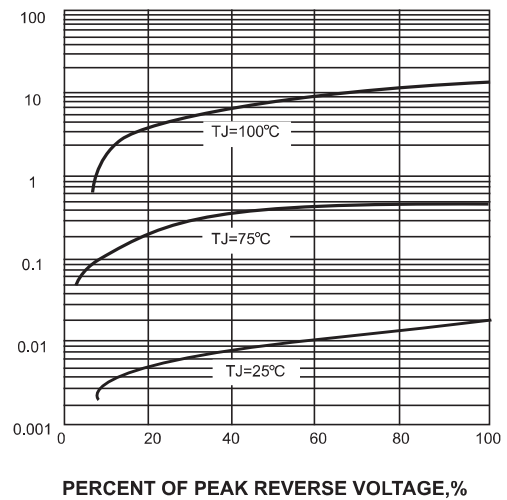
INSTANTANEOUS FORWARD
CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



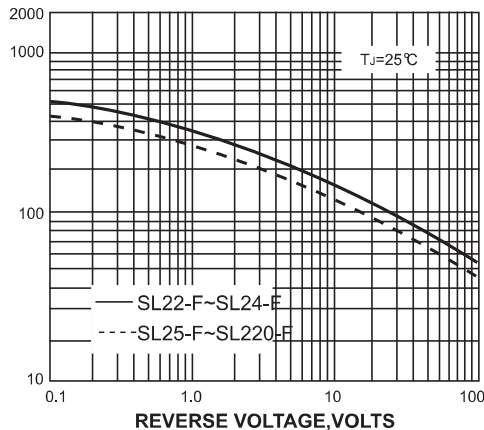
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



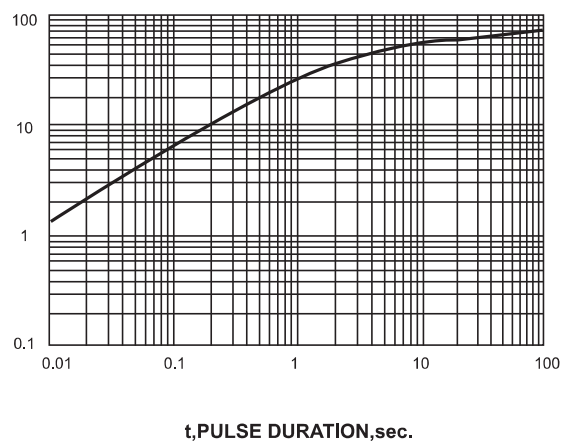
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE

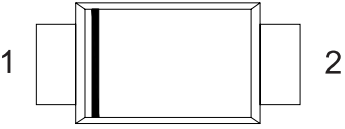


TRANSIENT THERMAL IMPEDANCE,
°C/W

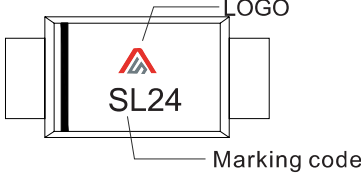
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



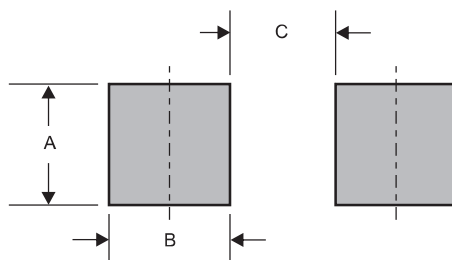
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code	Example
SL22-F	SL22	
SL23-F	SL23	
SL24-F	SL24	
SL25-F	SL25	
SL26-F	SL26	
SL28-F	SL28	
SL210-F	SL210	
SL215-F	SL215	
SL220-F	SL220	

Suggested solder pad layout



Dimensions in inches and (millimeters)

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