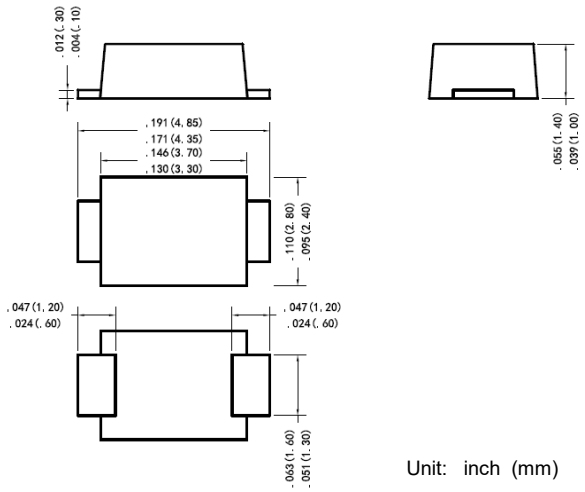
Surface Mount Rectifier Diode

Features

- Low reverse leakage
- High forward surge capability
- High reliability
- AEC-Q101 qualified
- High temperature soldering guaranteed:260℃/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

SMAF



Unit: inch (mm)

Mechanical Data

- Case:SMAF Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

Maximum Ratings & Characteristics (T_A=25°C unless otherwise noted)

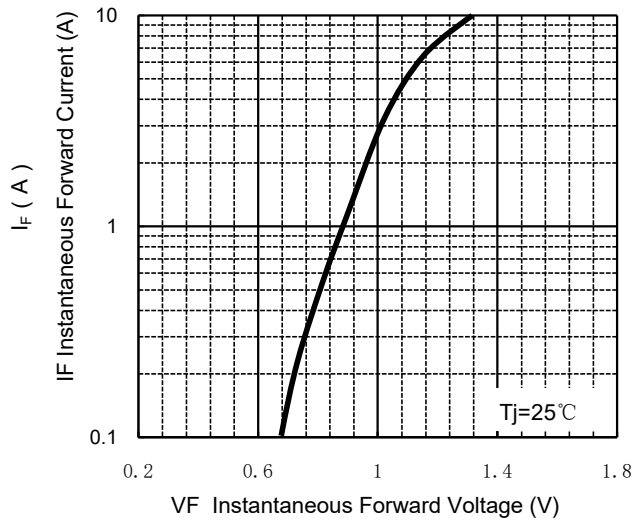
Parameter		Symbol	S2A AFQ	S2B AFQ	S2D AFQ	S2G AFQ	S2J AFQ	S2K AFQ	S2M AFQ	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current		$I_{F(AV)}$	2.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave		I_{FSM}	50							A
@I_F=2.0A Maximum forward voltage		V_F	1.1							V
@V_{DC} Maximum reverse current	T_A= 25℃	I_R	5							μA
	T_A= 125℃		100							
Typical thermal resistance (Note 1)		$R_{\theta JA}$	85							℃/W
VR=4.0V,f=1MHz Type junction capacitance		C_J	20							pF
Operating junction and storage temperature rang		T_J, T_{STG}	-55 to +150							℃

Note:

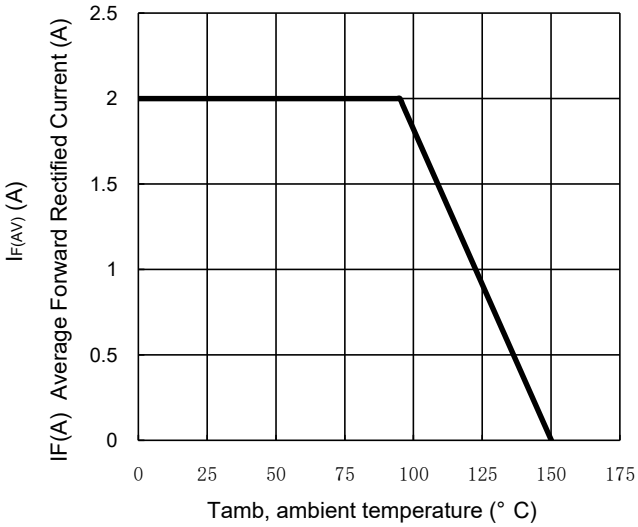
1) Thermal resistance from junction to ambient, PCB mounted.

Characteristic Curves

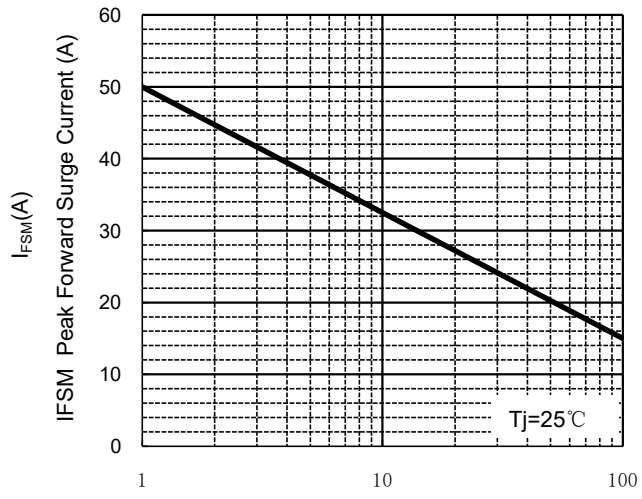
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS