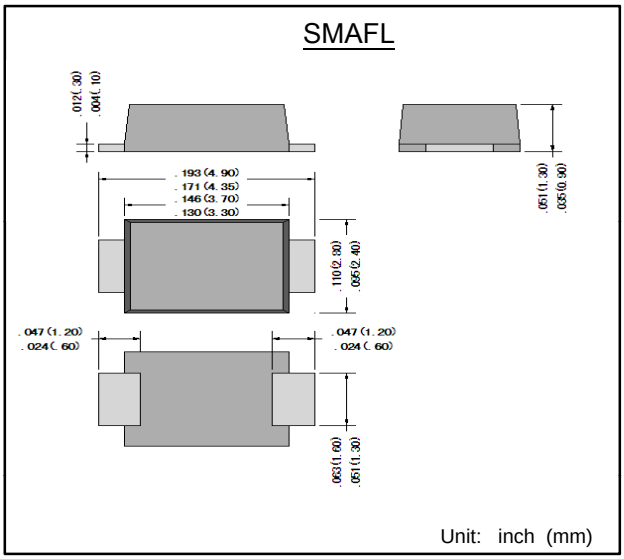
SS54F-SMAF-60M

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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: 260 °C/10 seconds at terminals



Mechanical Data

Case : JEDEC SMAF molded plastic body
Terminals : Solderable per MIL-STD-750,Method 2026
Polarity : Color band denotes cathode end
Mounting Position : Any
Weight : 0.0018 ounce, 0.064 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	SS54F-SMAF-60M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current at TL(see fig.1)	$I_{(AV)}$	5.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	150	A
Maximum instantaneous forward voltage at 5.0A	V_F	0.55	V
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	0.5	mA
Maximum DC reverse current at rated DC blocking voltage T_A=125℃	I_R	20.0	mA
Typical junction capacitance (NOTE 1)	C_J	200	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0	℃/W
Operating junction temperature range	T_J	-50 to +125	℃
Storage temperature range	T_{STG}	-55 to +150	℃

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

Typical Characterisitics

FIG. 1- FORWARD CURRENT DERATING CURVE

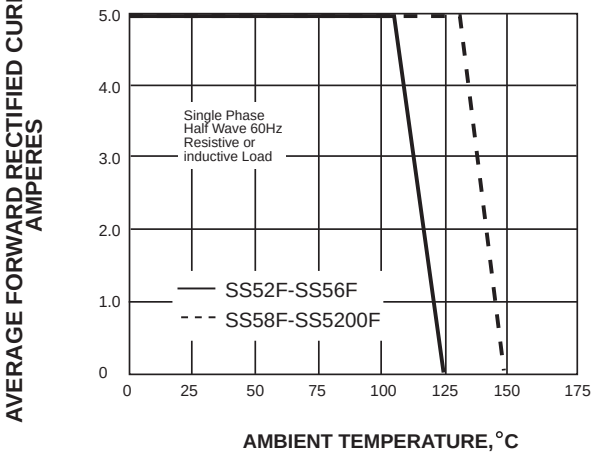


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

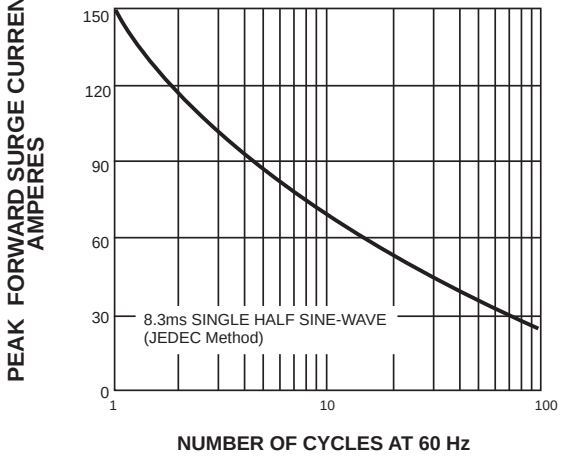


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

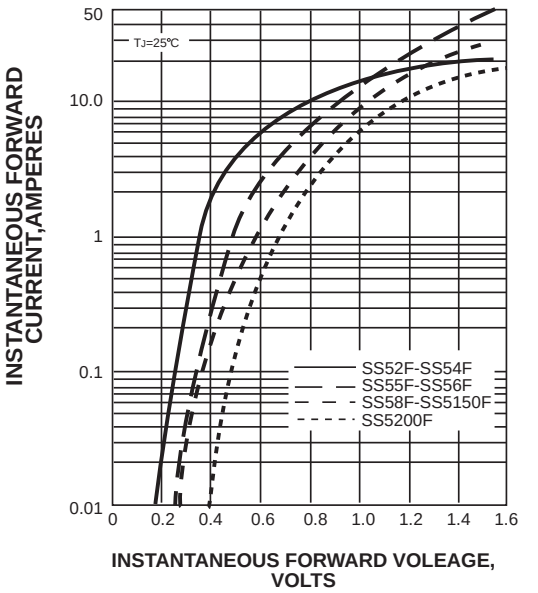


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

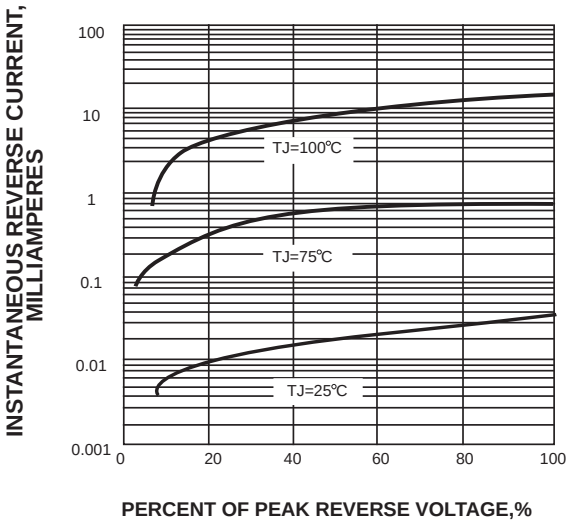


FIG. 5-TYPICAL JUNCTION CAPACITANCE

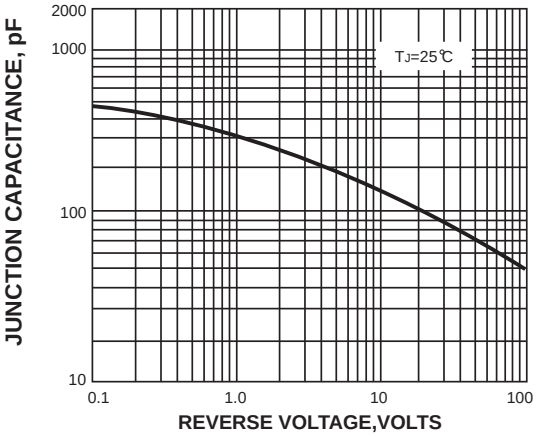
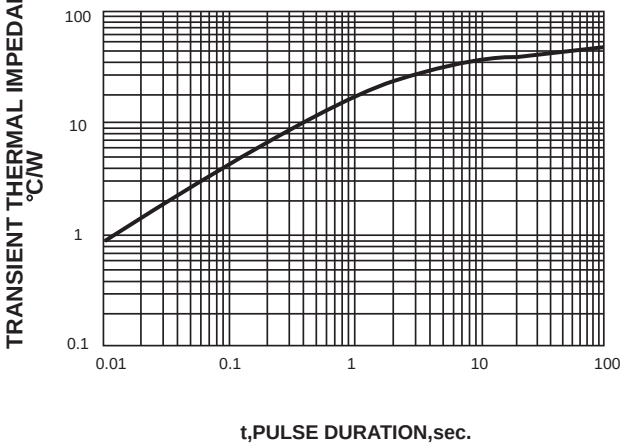


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.