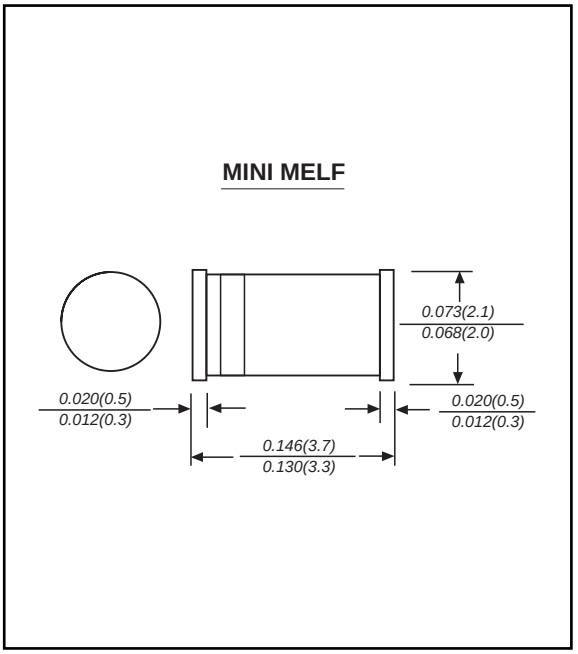
SM5817 THRU SM5819

Schottky Barrier Diodes

Silicon epitaxial planer type

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500 / 228
- Low leakage current



Mechanical data

Case : Molded plastic, MINI-MELF
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
Polarity : Indicated by cathode band
Mounting Position : Any
Weight : 0.015 gram

MAXIMUM RATINGS (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			25	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			1.0	mA
	V_R = V_{RRM} T_A = 100°C				10	mA
Thermal resistance	Junction to ambient	Rq_{JA}		80		°C / w
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	C_J		110		pF
Storage temperature		T_{STG}	-55		+150	°C

SYMBOLS	MARKING CODE	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature (°C)
SM5817	-	20	14	20	0.45	-55 to +125
SM5818	-	30	21	30	0.55	
SM5819	-	40	28	40	0.60	

*1 Repetitive peak reverse voltage
*2 RMS voltage
*3 Continuous reverse voltage
*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (SM5817 THRU SM5819)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

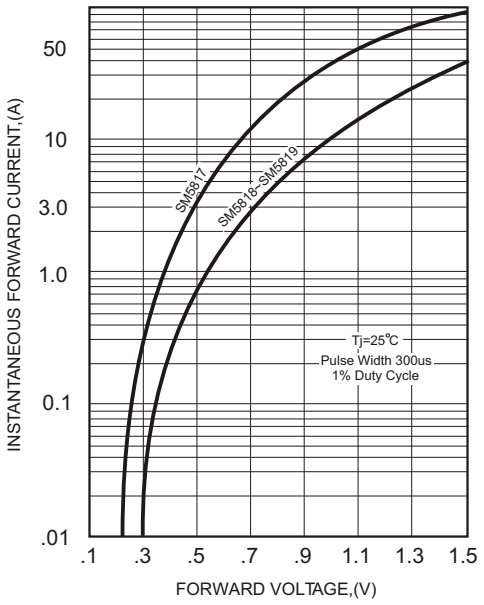


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

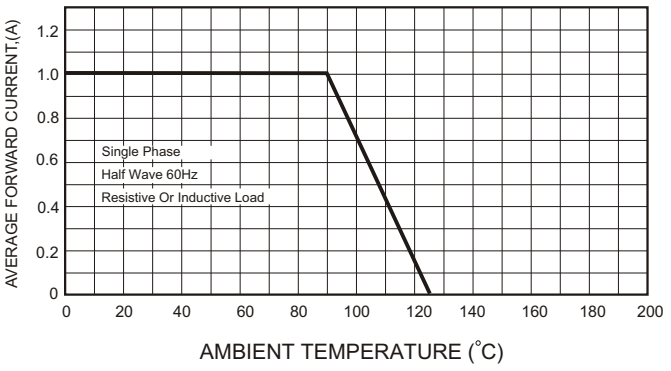


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

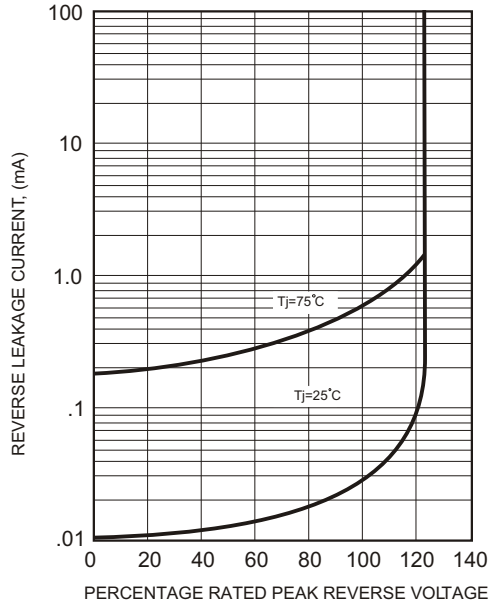


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

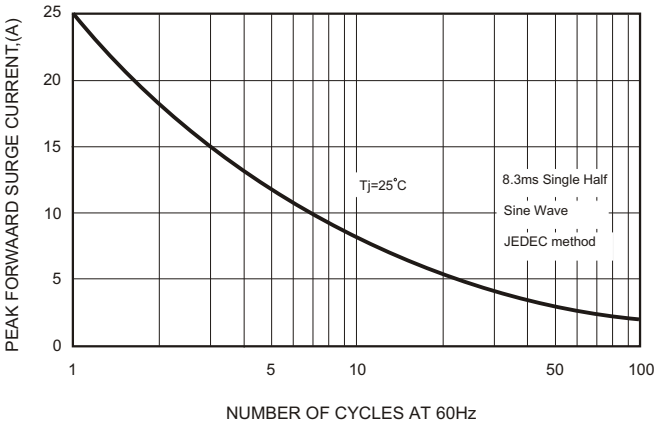


FIG.5-TYPICAL JUNCTION CAPACITANCE

