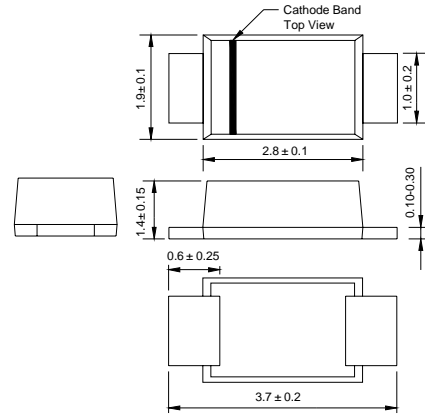


MBRX0530

Surface Mount Schottky Rectifiers
REVERSE VOLTAGE: 30 V
CURRENT: 0.5 A



SOD-123FL



Features

- Low profile package
- For surface mounted applications
- Idear for automated placement
- Low power loss,high efficiency
- High temperature soldering:
250 /10 seconds at terminals

Mechanical Data

- Case:JEDEC SOD-123FL,molded plastic over passivated chip
- Polarity: Color band denotes cathode end
- Weight: 0.003 ounces, 0.01 gram
- Device marking code:B3

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

ABSOLUTE RATINGS

Parameter	Symbol	Value	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Maximum working peak reverse voltage	V_{RWM}	30	V
Maximum DC blocking voltage	V_R	30	V
Maximum average forward rectified current at rated V_R @ $T_L=100$	$I_{(AV)}$	0.5	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	5.5	A
Maximum instantaneous forward voltage @ $I_F=0.1A, T_J=25$	V_F	0.375	V
forward voltage @ $I_F=0.5A, T_J=25$		0.43	
Maximum DC reverse current @Rated dc Voltage, $T_C=25$ at rated DC blocking voltage $V_R=15V, T_C=25$	I_R	130	μA
		20	
Typical thermal resistance junction to ambient (NOTE 1)	$R_{j\theta A}$	206	/W
Typical thermal resistance junction to lead	$R_{j\theta L}$	150	/W
Operating temperature range	T_j	-55----+150	
Storage temperature range	T_{STG}	-55----+150	

NOTES:1.inch square pad size (1 x 0.5 inch for each lead) on FR4 board.

Ratings AND Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

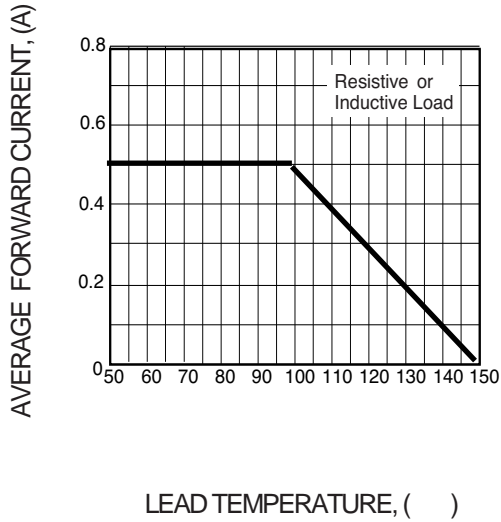


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

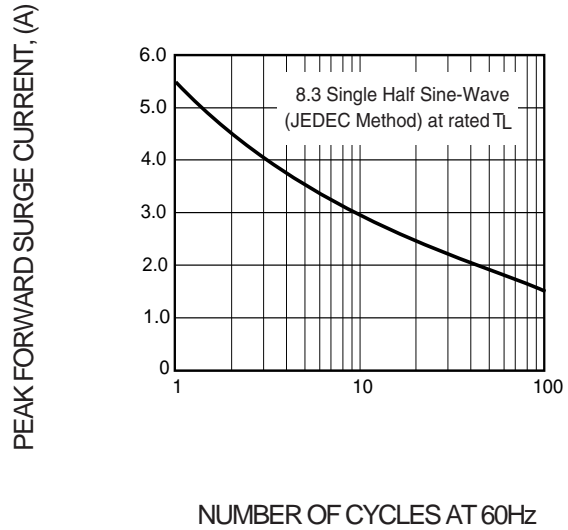


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

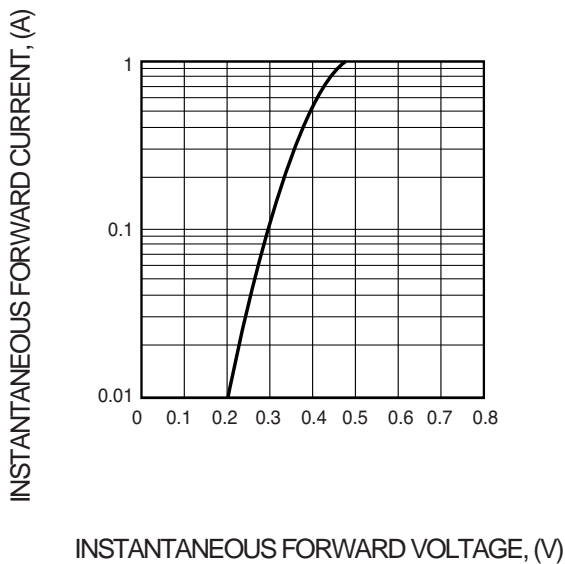


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

