

Features

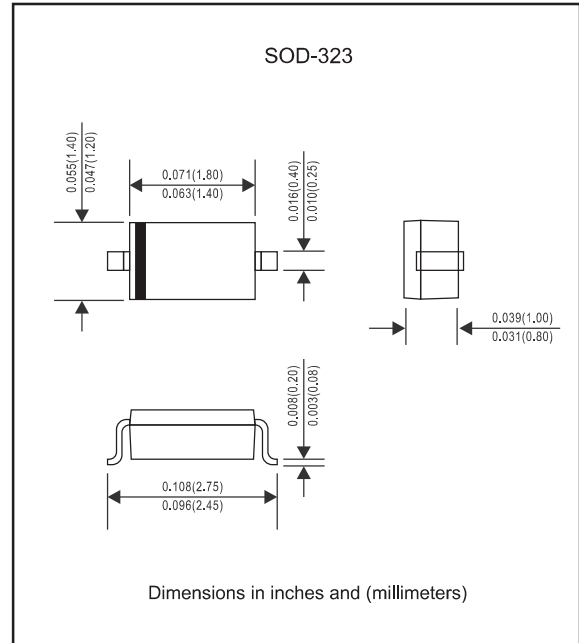
- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

Mechanical data

- Case:** JEDEC SOD-323 molded plastic body
- Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity:** Color band denotes cathode end
- Mounting Position:** Any
- Marking:** SJ



Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOLS	PMEG2010EJ		UNITS
Peak repetitive peak reverse voltage	V_{RRM}	20		V
Working peak	V_{RWM}			
DC Blocking voltage	V_R			
RMS Reverse voltage	$V_{R(RMS)}$	14		V
Average rectified output current	I_o	1		A
Peak forward surge current @=8.3ms	I_{FSM}	9		A
Power dissipation	P_d	250		mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500		K/W
Operating junction temperature range	T_J	-55 to +150		$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55 to +150		
Non-Repetitive peak reverse voltage	V_{RM}	20		V

PARAMETER	SYMBOLS	Min.	Max.	Unit	Test conditions
Reverse breakdown voltage	$V_{(BR)}$	20		V	$I_R=1\text{mA}$
Reverse voltage leakage current	I_R		1	mA	$V_R=20\text{V}$
Forward voltage	V_F		0.45 0.75	V	$I_F=1\text{A}$ $I_F=3\text{A}$
Diode capacitance	C_D		120	pF	$V_R=4\text{V}, f=1.0\text{MHz}$

Rating and characteristic curves

FIG. 1- FORWARD CURRENT DERATING CURVE

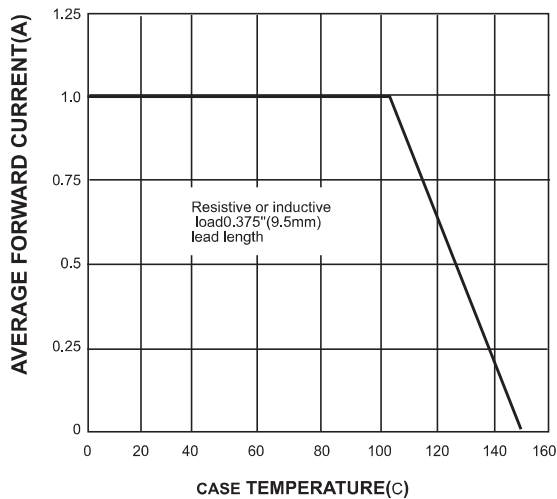


FIG. 2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

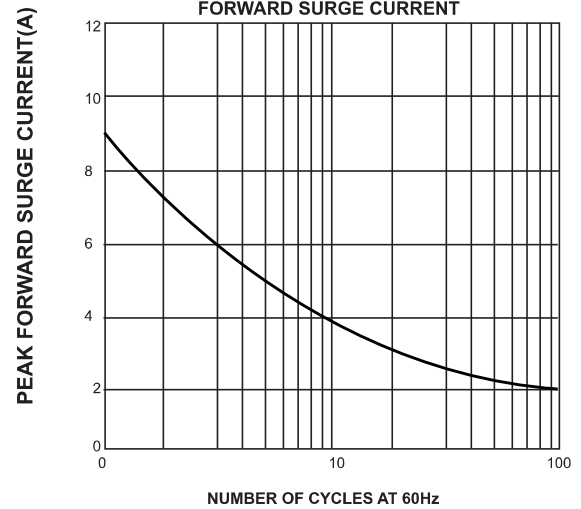


FIG. 3- TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

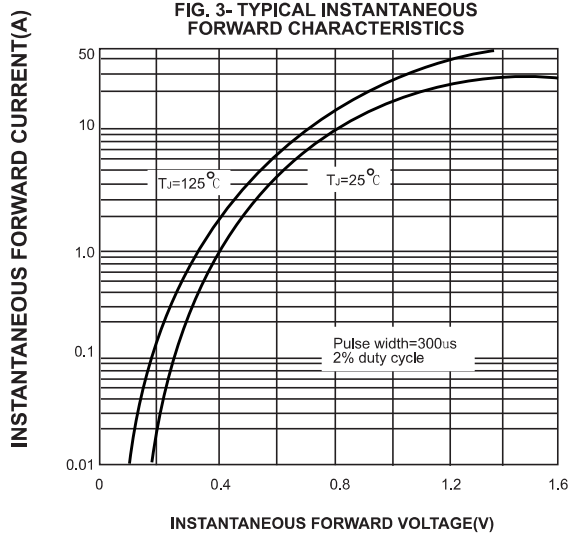


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

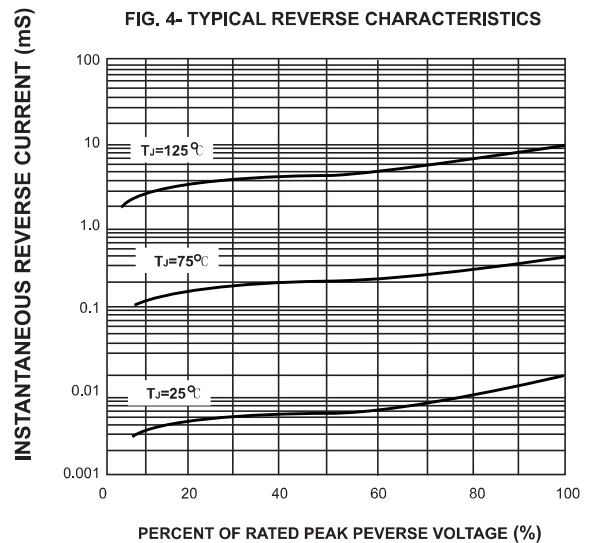


FIG. 5- TYPICAL JUNCTION CAPACITANCE

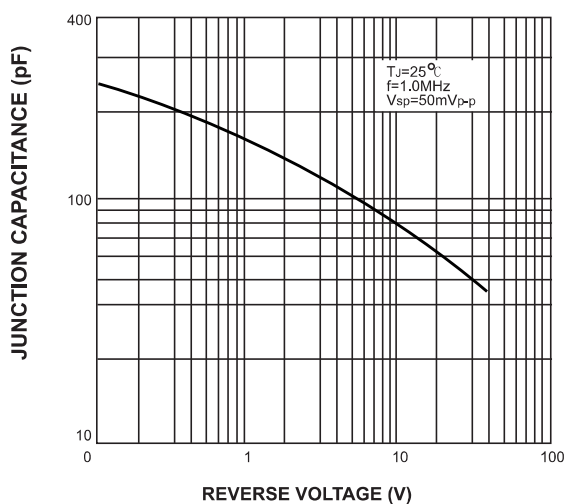


FIG. 6-TYPICAL TRANSIENT
THERMAL IMPEDANCE

