

RB161VA-20

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20V Forward Current - 1.0A

FEATURES

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

MECHANICAL DATA

- **Case:** Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Polarity symbols marked on case
- **Marking:** x



SOD-323

Maximum ratings and electrical characteristics, Single diode @T_A=25°C

PARAMETER	SYMBOLS	FIGURE	UNITS
Peak repetitive peak reverse voltage	V _{RRM}	20	V
Working peak reverse voltage	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}	25	A
Repetitive peak forward current	I _{FRM}	625	mA
Power dissipation	P _d	250	mW
Thermal resistance junction to ambient	R _{θJA}	500	K/W
Storage temperature	T _{STG}	-65 to +150	°C
Non-Repetitive peak reverse voltage	V _{RM}	20	V

Electrical ratings @T_A=25°C

PARAMETER	SYMBOLS	Min.	Max.	Unit	Test conditions
Reverse breakdown voltage	V _(BR)	20		V	I _R =1mA
Reverse voltage leakage current	I _R		1	mA	V _R =20V
Forward voltage	V _F		0.45	V	I _F =1A
Diode capacitance	C _D		120	pF	V _R =4V,f=1.0MHz



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FIG. 1- FORWARD CURRENT DERATING CURVE

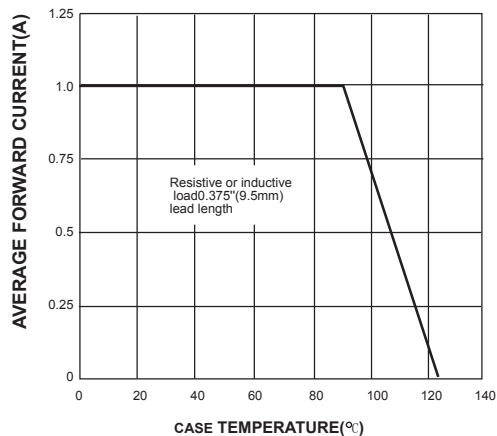


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

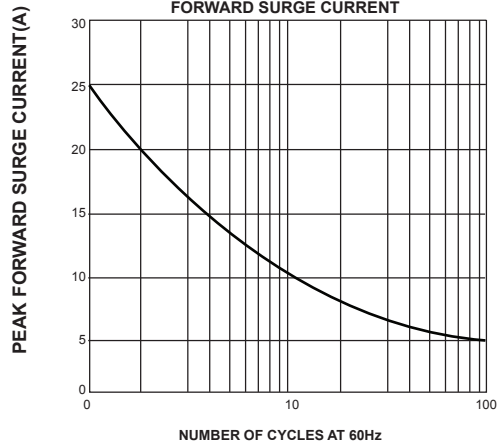


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

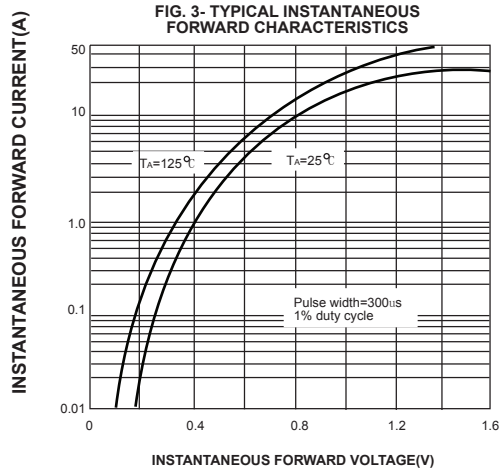


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

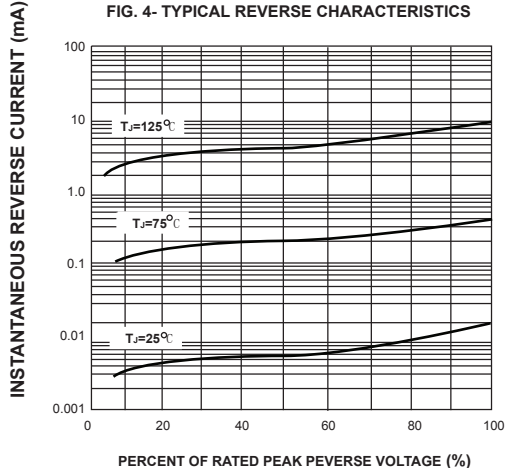


FIG. 5- TYPICAL JUNCTION CAPACITANCE

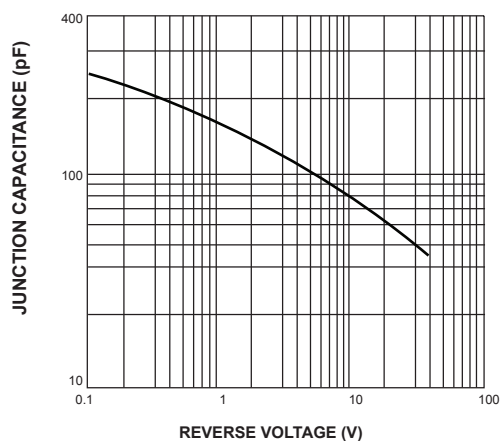


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

