TAYCHIPST

MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

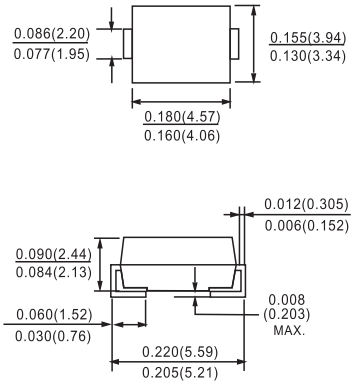
BR34 THRU BR320

40V-200V 3.0A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0032 ounce, 0.092 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	BR34	BR34A	BR35	BR36	BR38	BR39	BR310	BR315	BR320	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See figure 1)	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	80									A
Maximum Forward Voltage at 3.0A (Note 1)	V_F	0.70		0.74		0.80			0.90		V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=100°C	I_R	0.05 20									mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	20 75									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150	-65 to +175								°C

NOTES:

1. Pulse Test with PW =300μsec, 2% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm^2 (.013mm thick) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES BR34 THRU BR320

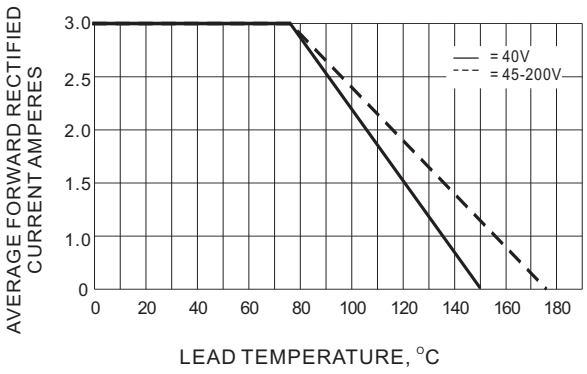


Fig.1- FORWARD CURRENT DERATING CURVE

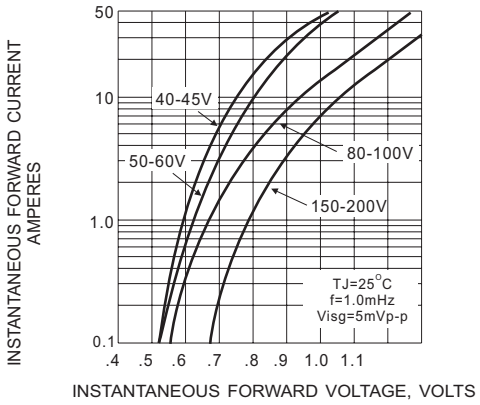


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

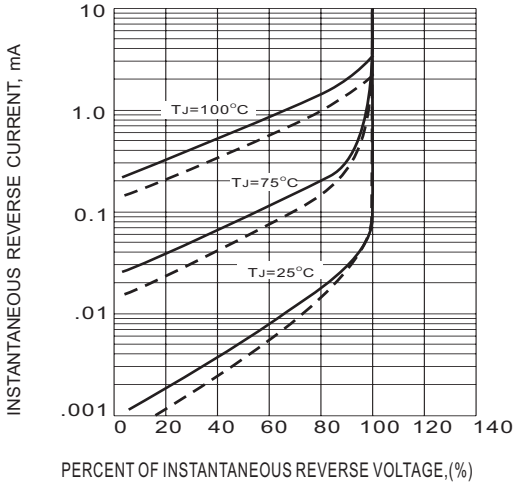


Fig.3- TYPICAL REVERSE CHARACTERISTIC

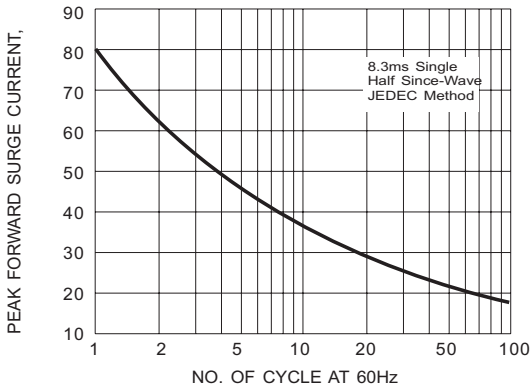


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT