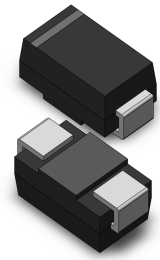
BX34 - BX320

SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 40 - 200V
CURRENT: 3.0 A



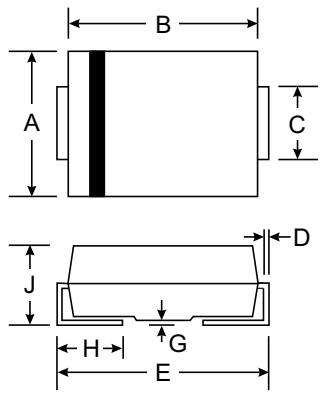
Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability
- Classification 94V-0
- High Reliability
- High Current Capability and Low VF
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath

Mechanical Data

- Case: SMA(DO-214AC), Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	BX34	BX34A	BX35	BX36	BX38	BX39	BX310	BX315	BX320	Unit
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 figure1)	$I_{F(AV)}$	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, 1% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm^2 (.013mm thick) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES BX34 THRU BX320

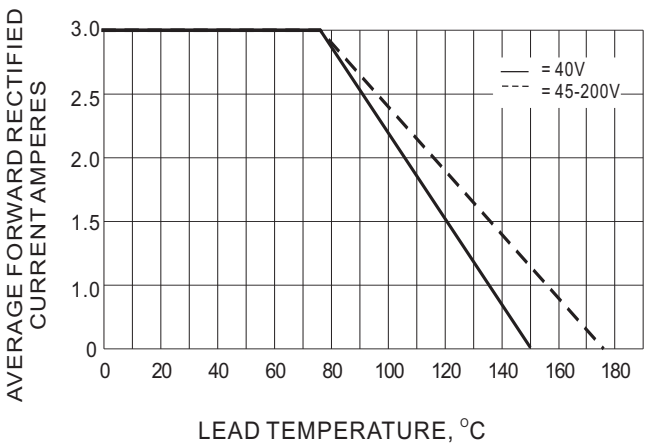


Fig.1-FORWARDCURRENTDERATINGCURVE

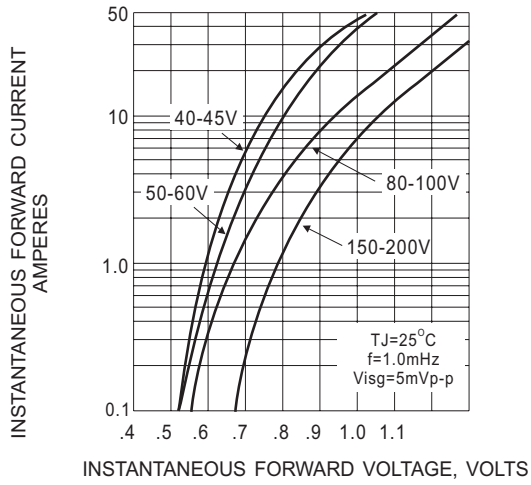


Fig.2-TYPICALINSTANTANEOUSFORWARD CHARACTERISTIC

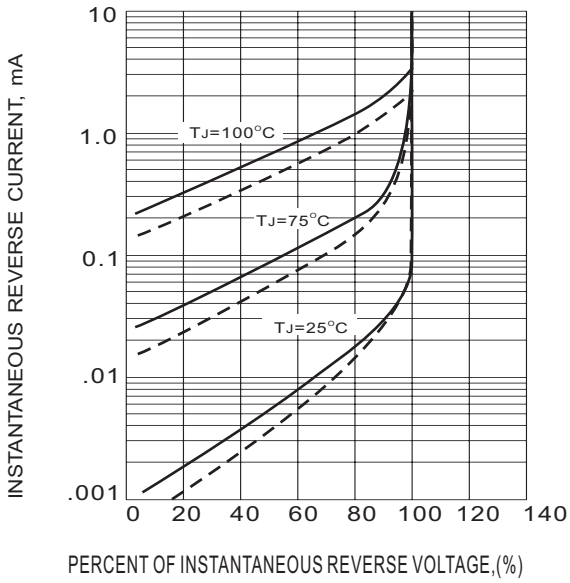


Fig.3-TYPICALREVERSECHARACTERISTIC

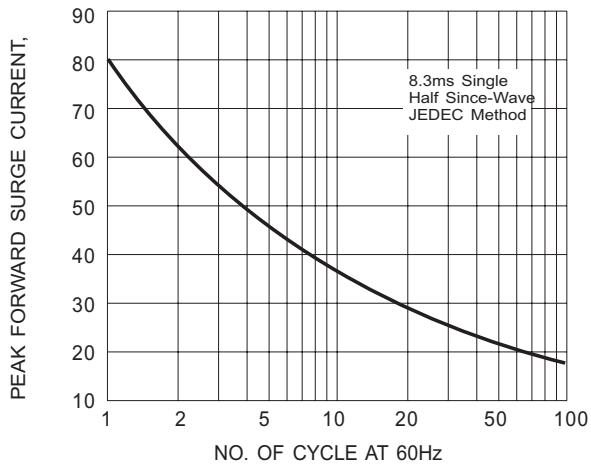


Fig.4-MAXIMUMNON-REPETITIVESURGECURRENT