SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 --- 60 V
CURRENT: 5.0 A

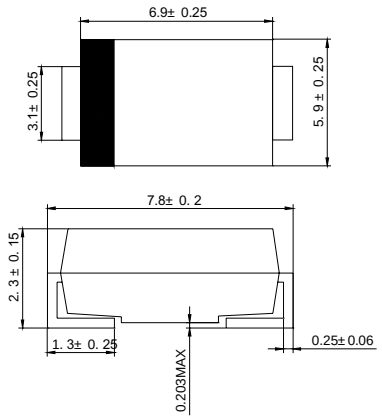
FEATURES

- ◇ Plastic package has Underwriters Laborator Flammability Classification 94V-0
- ◇ For surface mounted applications
- ◇ Low profile package
- ◇ Built-in strain relief
- ◇ Metal silicon junction, majority carrier conduction
- ◇ High surge capability
- ◇ High current capability,low forward voltage drop
- ◇ Low power loss,high effciency
- ◇ For use in low voltage high frequency inverters,free wheeling and polarity protection applications
- ◇ Guardring for overvoltage protection
- ◇ High temperature soldering guaranteed:250°C/10 seconds at terminals

MECHANICAL DATA

- ◇ Case:JEDEC DO-214AB,molded plastic over passivated chip
- ◇ Terminals:Solder Plated, solderable per MIL-STD-750, Method 2026
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.007 ounces, 0.21 gram

DO - 214AB(SMC)



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		B520C	B530C	B540C	B550C	B560C	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum average forw ord rectified current at T_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	5.0					A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load(JEDEC Method)	I_{FSM}	175.0					A
Maximum instantaneous forw ard voltage at 5.0A (NOTE.1)	V_F	0.50			0.70		V
Maximum DC reverse current @T_A=25°C	I_R	0.5					mA
at rated DC blockjing voltage(NOTE1) @T_A=100°C		20					
Typical thermal resitance (NOTE2)	$R_{\theta JA}$ $R_{\theta JL}$	50.0 10.0					°C/W
Operating junction and storage temperature range	T_{STG}	-65--- +150					°C
Storage temperature range	T_J	-65--- +150			-65--- +150		°C

NOTE: 1.Pulse test:300 μS pulse width,1%duty cycle
2. P.C.B.mounted with 0.55"X0.55"(14.0X14.0mm²)copper pad areas

FIG.1 -- FORWARD DERATING CURVE

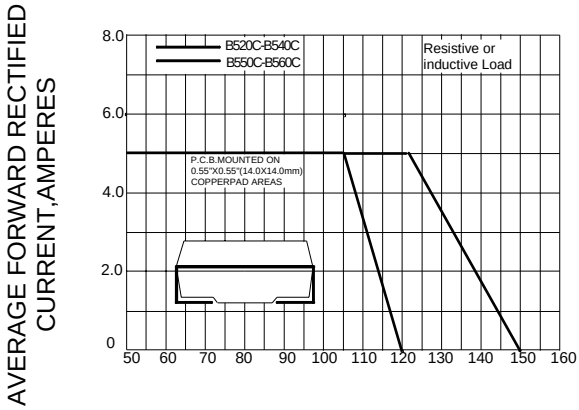


FIG.2-- PEAK FORWARD SURGE CURRENT

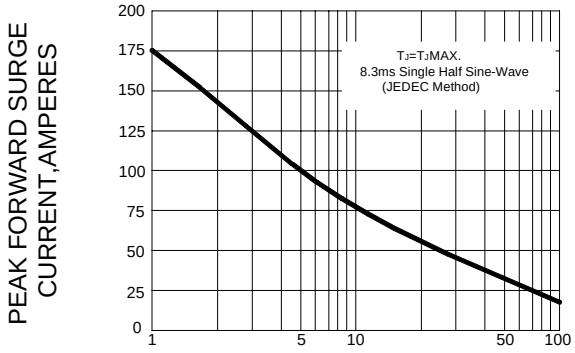


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

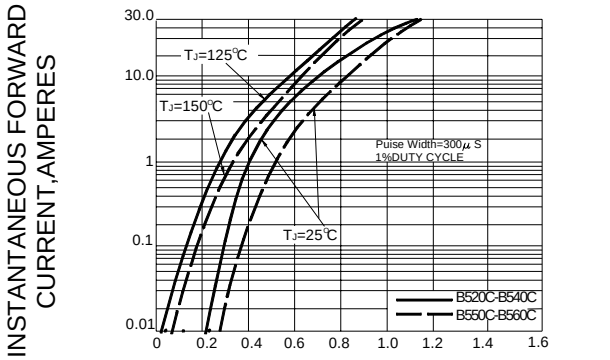


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

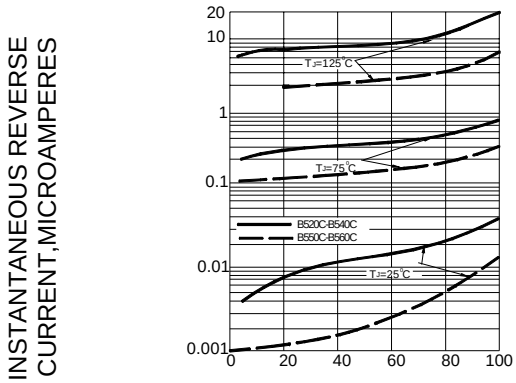


FIG.5-TYPICAL JUNCTION CAPACITANCE

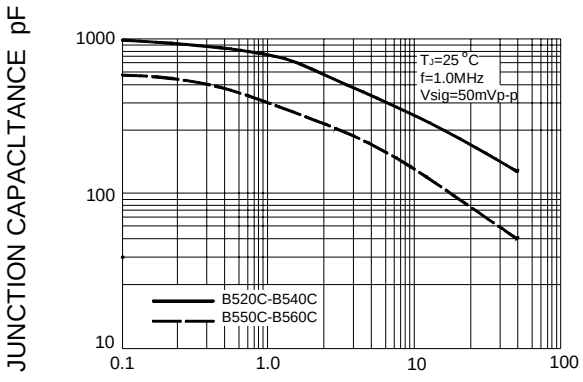


FIG.6-- TYPICAL TRANSIENT THERMAL IMPEDANCE

