



# DATA SHEET

## SD620CT~SD6100CT

### SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 100 Volts **CURRENT** 6.0 Amperes **TO-251AB** Unit : inch (mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

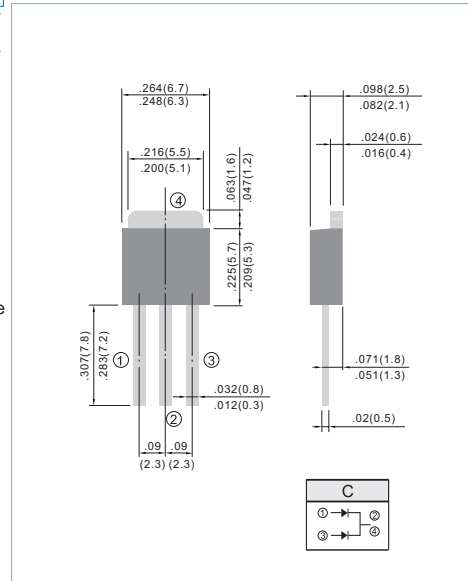
#### MECHANICAL DATA

Case: D PAK/TO-251AB molded plastic

Terminals: Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: As marking

Weight: 0.015 ounces, 0.4grams.



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

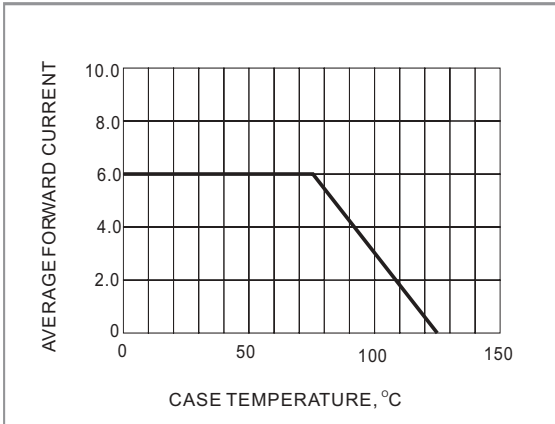
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SD 620CT	SD 630CT	SD 640CT	SD 650CT	SD 660CT	SD 680CT	SD 6100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Current 375*(9.5mm) lead length at Tc =75°C	$I_{AV}$	6.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	75							A
Maximum Forward Voltage at 3.0A per leg	$V_F$	0.55			0.70		0.85		V
Maximum DC Reverse Current TJ=25°C at Rated DC Blocking Voltage TJ=100°C	$I_R$				0.2				mA
Typical Thermal Resistance	$R_{\theta JC}$				5				°C / W
Operating Junction Temperature Rang	$T_J$				-50 to +125				°C
Storage Temperature Rang	$T_J, T_{STG}$				-50 to +150				°C

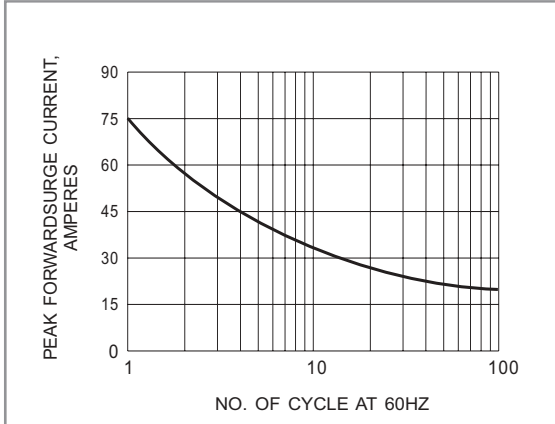
Note: Both Bonding and Chip structure are available.



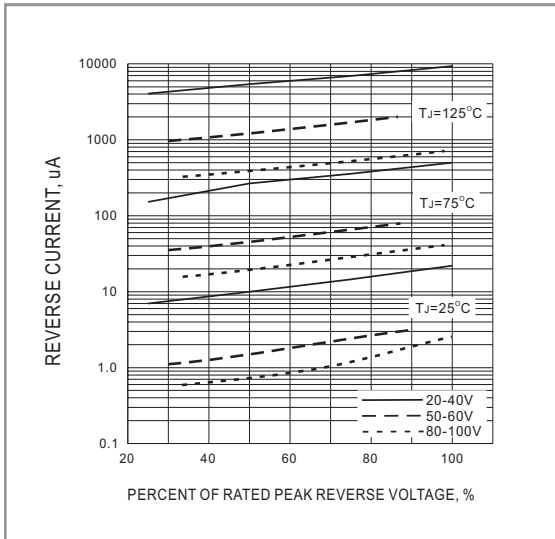
**RATING AND CHARACTERISTIC CURVES**



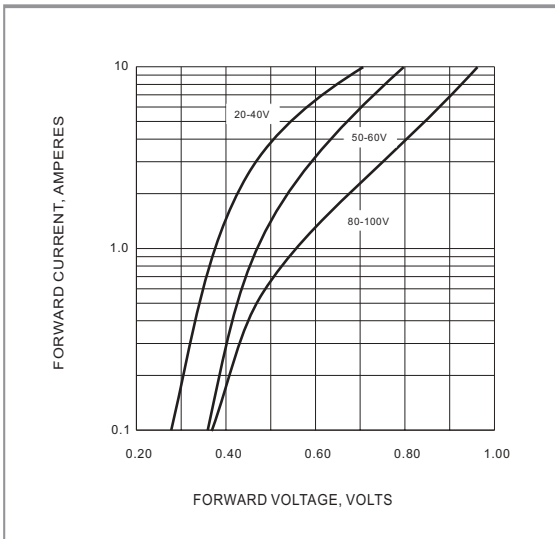
**Fig. 1- FORWARD CURRENT DERATING CURVE**



**Fig. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig. 3- TYPICAL REVERSE CHARACTERISTIC**



**Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**