

Trench Schottky Barrier Rectifiers

Reverse Voltage - 80 V

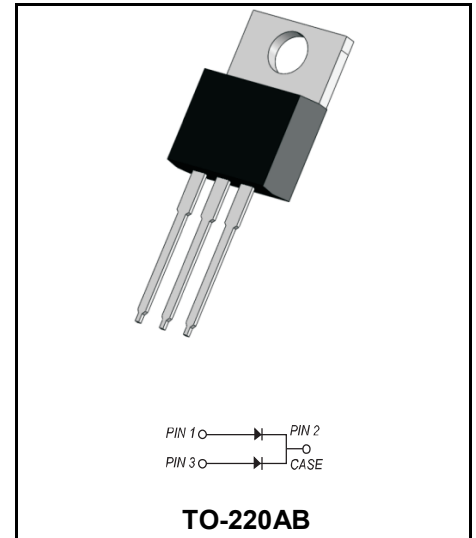
Forward Current - 40 A

Features

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Construction utilizes void-free molded plastic technique
- ◆Low forward voltage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed
260°C/10 seconds at terminals

Mechanical Data

- ◆Case : Molded plastic body
- ◆Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any



Primary Characteristic

$I_{(AV)}$	2*20A
V_{RRM}	80V
I_{FSM}	300A
V_F	0.65V
$T_J \text{ Max}$	150°C

Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}	56	V
Maximum DC Blocking Voltage	V_{DC}	80	V
Maximum Average Forward Rectified Current Per device rectified current at $T_c=110^\circ\text{C}$	$I_{(AV)}$	40 20	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	300	A
Operating Temperature Range	T_J	-50 ~ +150	°C
Storage Temperature Range	T_{STG}	-50 ~ +150	°C
Typical Thermal Resistance	$R_{\theta JC}$	2.0	°C/W

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)

Characteristics	Symbols	Value		Units
Forward Voltage Drop		Typ	Max	V
Maximum instantaneous forward voltage per diode at 20.0A	V_F	0.65	0.70	
Maximum DC reverse current at rated DC blocking voltage	I_R	30 3	100 20	u A mA

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

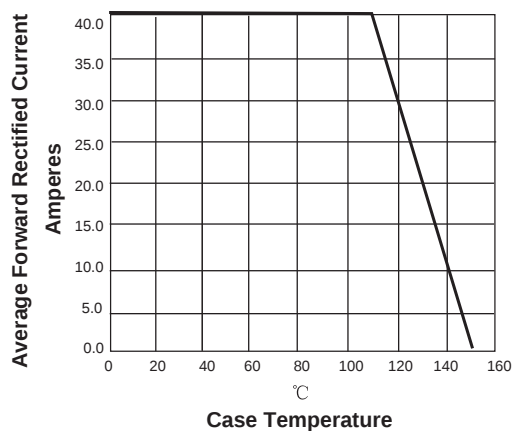


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

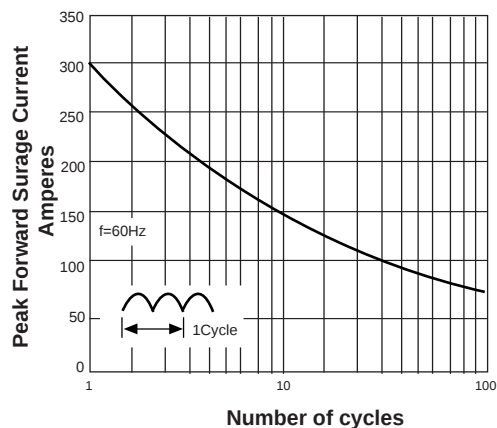


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

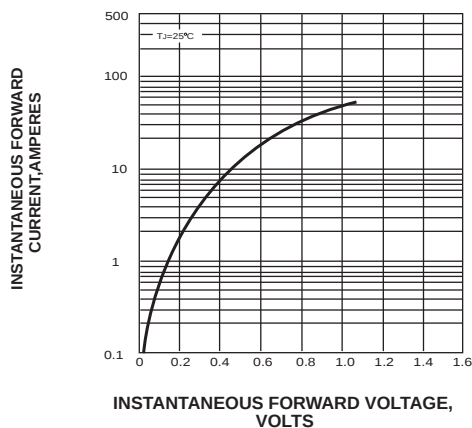
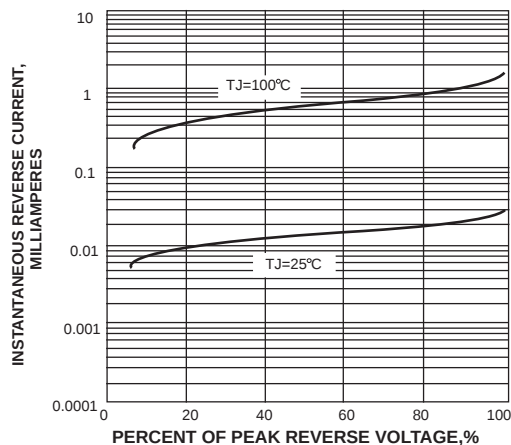
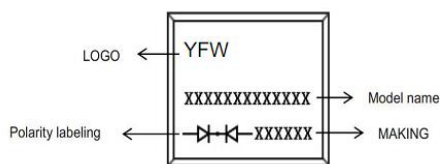


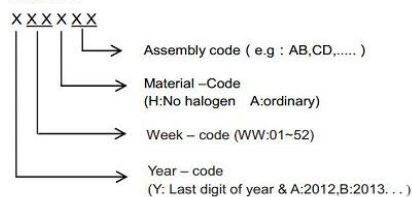
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking On The Body



MAKING:



Ordering Information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SRT40L80CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton

Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions Millimeters

TO-220AB

