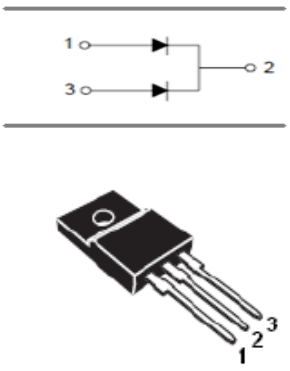
Schottky Barrier Rectifiers STSDF1030CT---STSDF1060CT

FEATURES

- Metal-Semiconductor Junction with Guard Ring.
- Epit axial Construction.
- Low Forward Voltage Drop,Low Switching Losses.
- High Surge Capability.
- For use in low voltage,high frequency
  Inverters,free wheeling,and polarity protecttion applications.
- The Plastic Material Carries U/L Recognition 94V-0.

Lead-free



ITO-220AB

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	STSDF1030CT	STSDF1035CT	STSDF1040CT	STSDF1045CT	STSDF1050CT	STSDF1060CT	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	V
V_{RMS}	RMS Voltage	21	25	28	32	35	42	V
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	V
$I_{F(AV)}$	Average Forward Rectified Current @T_A=100°C	10						A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimposed on rated load	175						A
$R_{\theta JC}$	Typical Thermal Resistance(Note1)	5.0						℃/W
T_j T_{stg}	Operating Junction and StorageTemperature Range	-55 to +150						℃

Note1.Thermal Resistance Junction to Case.

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ELECTRICAL CHARACTERISTICS@ Ta=25℃ unless otherwise specified

Parameter S	ymbol	Test conditions	STSDF1030CT-STSDF1045CT	STSDF1050CT-STSDF1060CT	UNIT
			MAX		
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25℃$ $V_R=V_{RRM}, T_A=100℃$	0.5 50		mA
Forward Voltage	V_F	I_F=5A	0.60	0.70	V

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

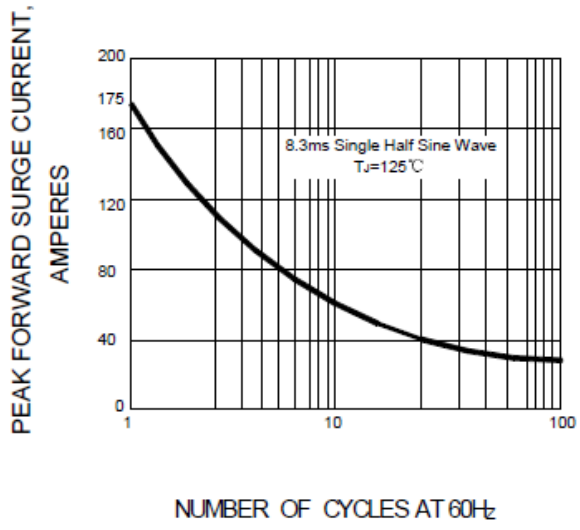


FIG.2 – FORWARD DERATING CURVE

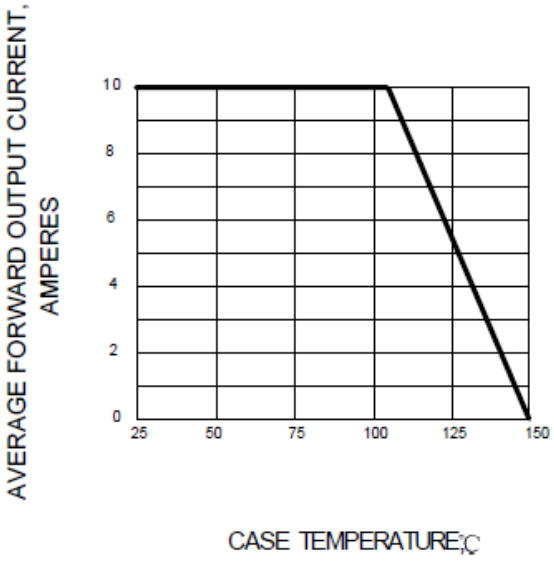


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

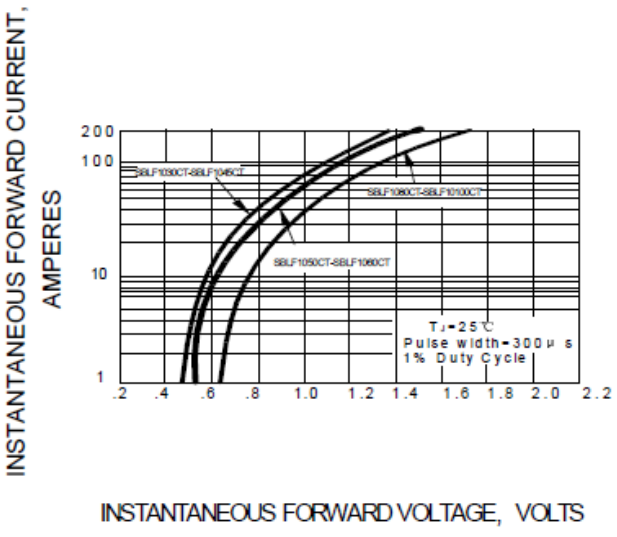
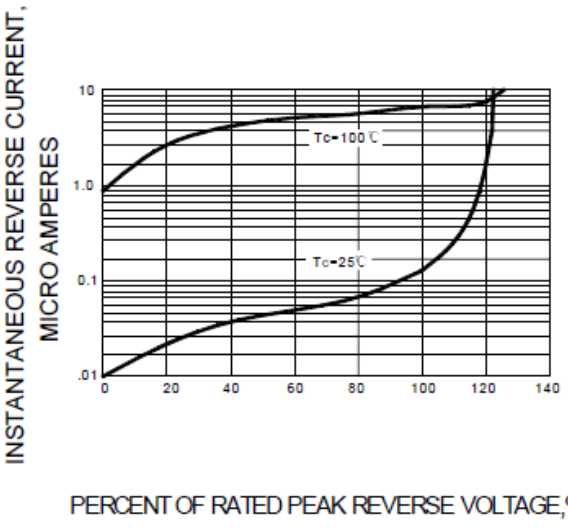


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



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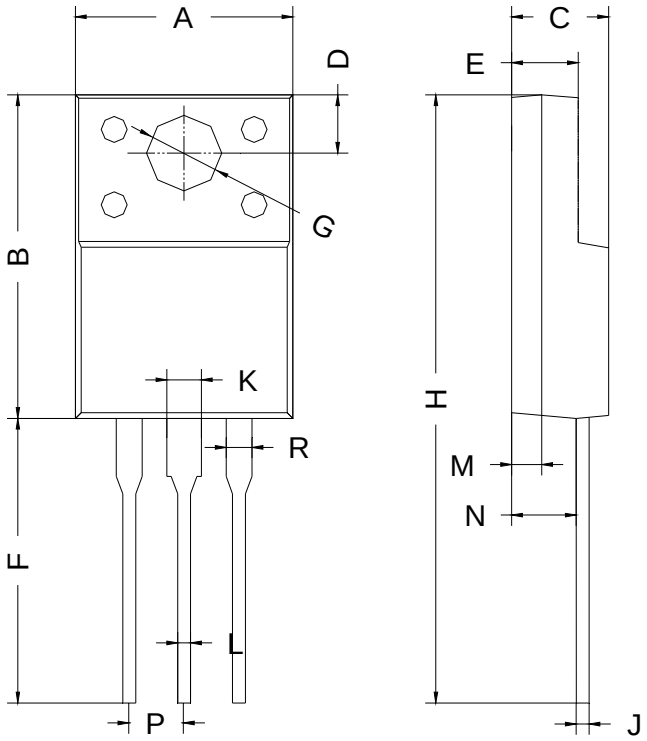
PACKAGE OUTLINE

Plastic surface mounted package ITO-220AB



ITO-220AB		
Dim	Min	Max
A	9.90	10.30
B	14.80	15.20
C	4.50 Typical	
D	2.70 Typical	
E	2.80	3.20
F	13.00	13.40
G	3.2 Typical	
H	28.00	28.40
J	0.60 Typical	
K	1.40	1.80
L	0.50	0.75
M	1.40 Typical	
N	2.90	3.10
P	2.45	2.65
R	1.20 Typical	
All Dimensions in mm		