

## SCHOTTKY BARRIER RECTIFIERS

### Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	30	A
$V_{RRM}$	30	V
$V_F @ 15A, T_j=125^{\circ}C$	0.38	V, typ
$T_j$ (operating/storage)	-65 to 150	$^{\circ}C$

**Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications**

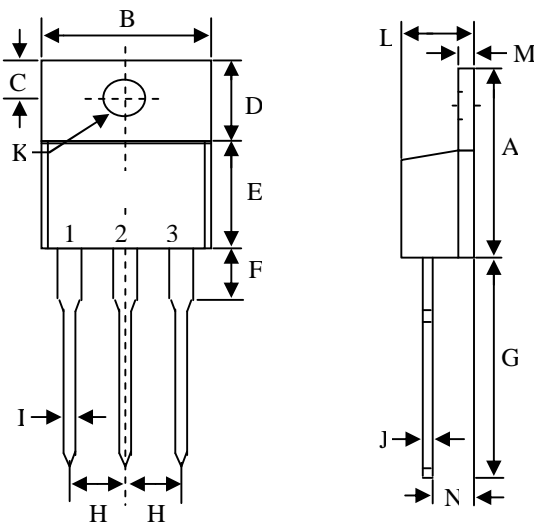
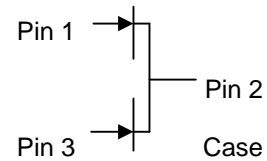
### ELECTRICAL FEATURES:

- ◆ Schottky Barrier Rectifier
- ◆ Guard Ring Protection
- ◆ Low Forward Voltage
- ◆ Reverse Energy Tested
- ◆ High Current Capability
- ◆ Case Material: Molded Plastic.

UL Flammability Class 94V-0

### MECHANICAL:

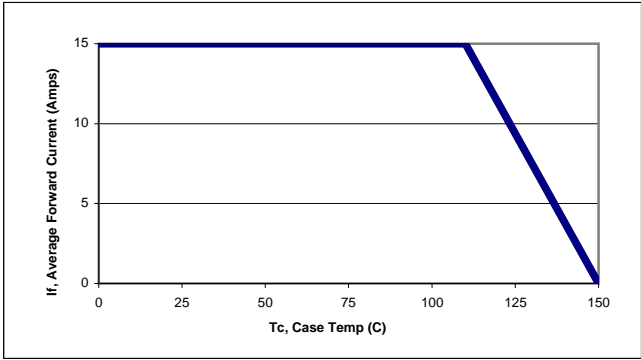
- \* Molded Plastic TO-220AB



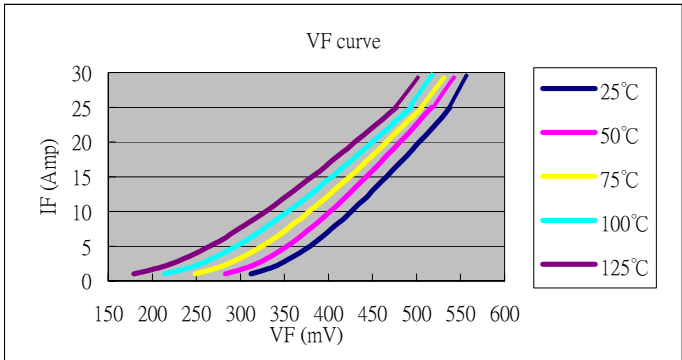
TO-220		
DIM	MIN	MAX
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	9.65	10.67
F	-	6.35
G	12.7	14.73
H	2.29	2.79
I	0.51	1.14
J	0.3	0.64
K	3.53	4.09
L	3.56	4.83
M	1.14	1.4
N	2.03	2.92
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics (at 25°C unless otherwise specified)				
	SYMBOL	VALUE		UNITS
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Reverse Voltage	$V_{RM}$ $V_{RWM}$ $V_{RRM}$	40		Volts
Average Rectified Forward Current at $T_c=110^\circ\text{C}$	$I_o$	30		Amps
Peak Forward Surge Current at 8.3mS single half-sine wave	$I_{FSM}$	250		Amps
Peak Repetitive Reverse Surge Current (2uS-1KHz)	$I_{RRM}$	3		Amps
Instantaneous Forward Voltage (per leg) $I_F= 15\text{A}; T_J= 25^\circ\text{C}$ $30\text{A}; T_J= 25^\circ\text{C}$ $I_F= 15\text{A}; T_J= 125^\circ\text{C}$	$V_F^*$	Typ --- --- ---	Max 0.48 0.57 0.40	Volts
Maximum Instantaneous Reverse Current at Rated $V_{RM}$ $T_J= 25^\circ\text{C}$ $T_J= 100^\circ\text{C}$	$I_R$	Typ --- ---	Max 1.2 300	mA
Maximum Rate of Voltage Change (at Rated $V_R$ )	dv/dt	10,000		V/uS
Maximum Thermal Resistance jc (per leg) Package = TO-220AB, TO-262, & TO-263 Package = ITO-220	$R_{\theta jc}$	2 4		°C/W
Operating and Storage Junction Temperature	$T_J$	-65 to +150		°C

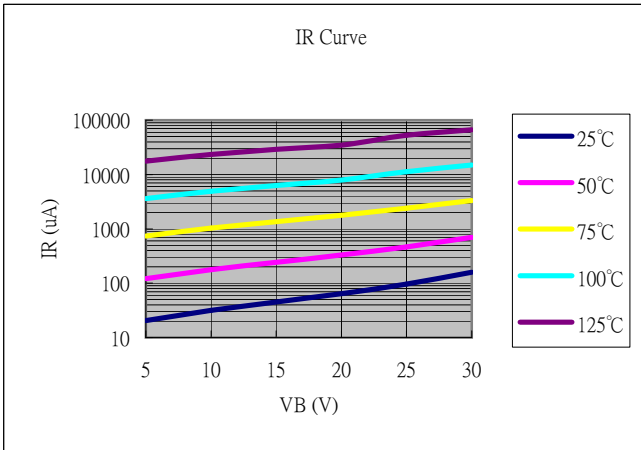
\* Pulse width < 300 uS, Duty cycle < 2%



**Figure 1: Current Derating Curve per element**



**Figure 2: Typical Forward Voltage**



**Figure 3: Typical Reverse Current**

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