

VOLTAGE RANGE: 30 - 200 V
CURRENT: 15 A



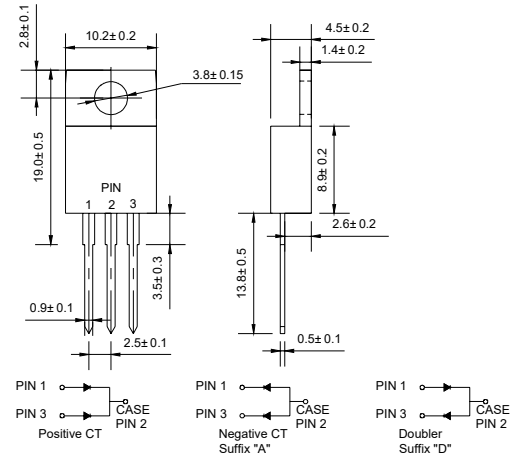
TO-220AB

Features

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

Mechanical Data

- ◇ Case: JEDEC TO-220AB, molded plastic body
- ◇ Polarity: As marked
- ◇ Position: Any
- ◇ Weight: 0.071ounce, 2.006 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	MBR 1530 CT	MBR 1535 CT	MBR 1540 CT	MBR 1545 CT	MBR 1550 CT	MBR 1560 CT	MBR 1580 CT	MBR 15100 CT	MBR 15150 CT	MBR 15200 CT	UNITS	
Maximum recurrent peak reverse voltage	V_{RRM}	30	35	40	45	50	60	80	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	21	25	28	32	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	30	35	40	45	50	60	80	100	150	200	V	
Maximum average forward total device rectified current @ $T_c = 125^\circ\text{C}$	$I_{F(AV)}$	15.0										A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150										A	
Maximum forward voltage (Note1) (15.0A, $T_c = 25^\circ\text{C}$)	V_F	0.7			0.8			0.85		0.95		V	
Maximum reverse current @ $T_c = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_c = 125^\circ\text{C}$	I_R	0.1						15					mA
Maximum thermal resistance (Note 2)	$R_{\theta JC}$	2.0										K/W	
Operating junction temperature range	T_J	- 55 ---- + 150										°C	
Storage temperature range	T_{STG}	- 55 ---- + 150										°C	

NOTE: 1. Pulse test: 300µs pulse width, 1% duty cycle.
2. Thermal resistance from junction to case.

Ratings AND Characteristic Curves

