Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 100 V

Forward Current - 30 A

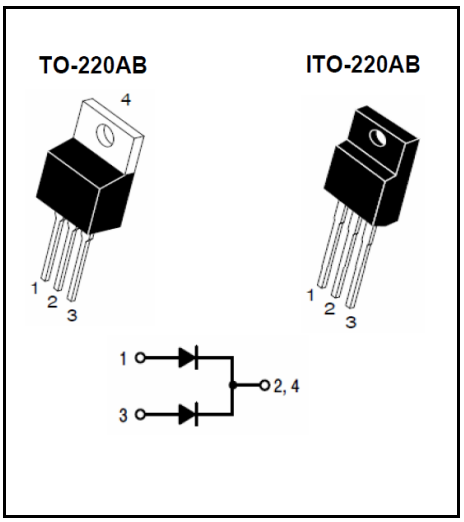
lead-free ROHS

FEATURES

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-220AB/ITO220AB
- Terminals: Solderable per MIL-STD-750, Method 2026



Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Parameter		Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS voltage		V_{RMS}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current	Per device	$I_{F(AV)}$	30	A
	Per diode		15	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	230	A
Operating Temperature Range		T_J	-55 ~ +150	°C
Storage Temperature Range		T_{STG}	-55 ~ +150	°C
Typical Thermal Resistance Per diode(munted on FR-4 PCB)	TO-220AB	$R_{\theta JC}$	2	°C/W
	ITO-220AB		4	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I_F=5A Instantaneous forward voltage per diode	TA=25°C		0.48	-	
	TA=125°C		0.43	-	
at I_F=15A Instantaneous forward voltage per diode	TA=25°C		0.66	0.72	
	TA=125°C		0.61	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	20	70	uA
	TA=125°C		-	50	mA

Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle
(2) Pulse test: Pulse width ≦ 40 ms

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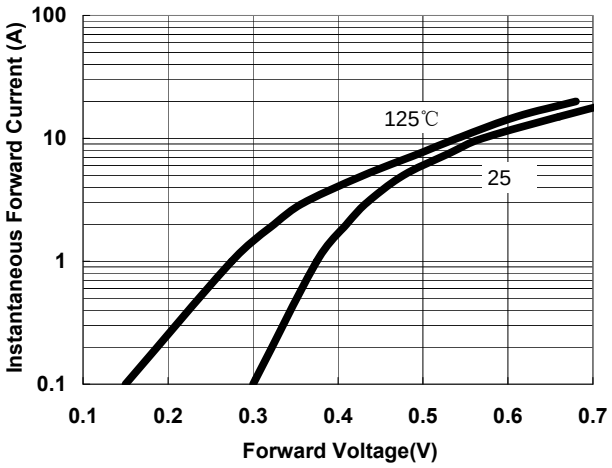
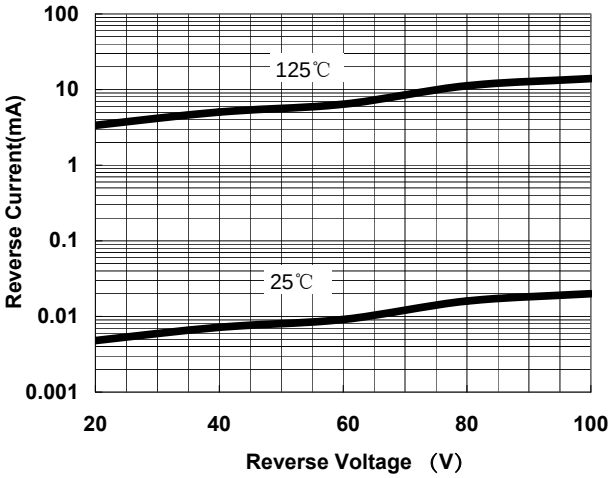
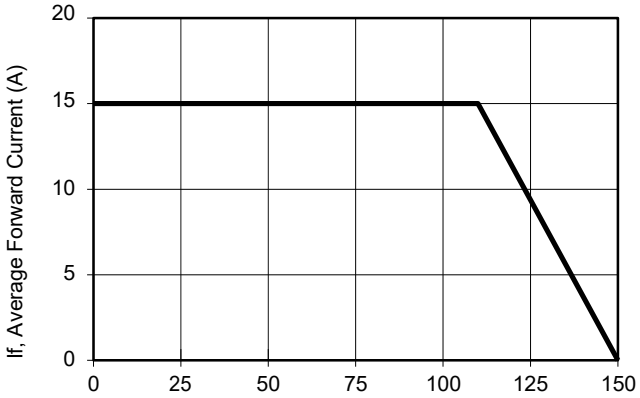
RATINGS AND CHARACTERISTIC CURVES



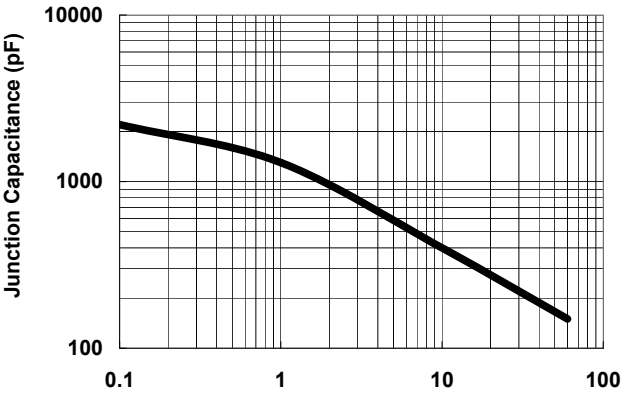
Forward Current Derating Curve



Typical Junction Capacitance Per Diode



Current Derating, Case



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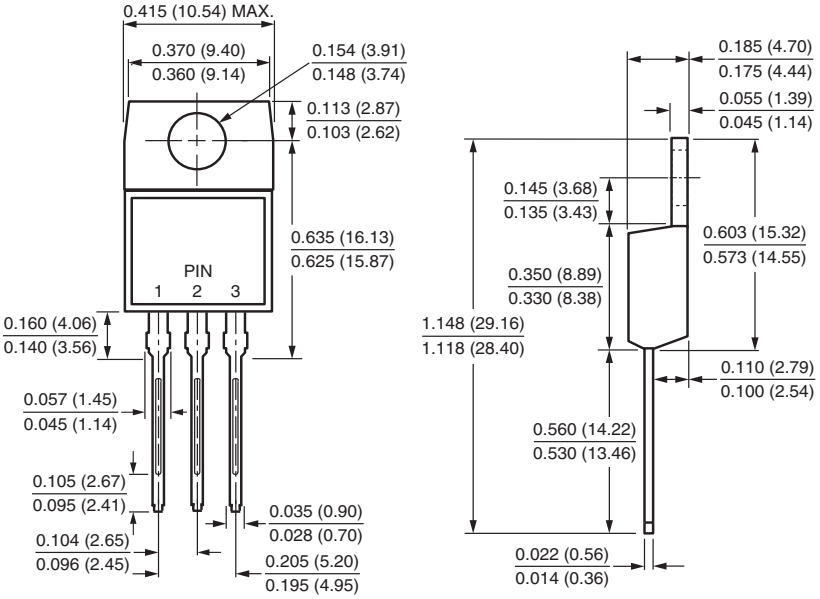
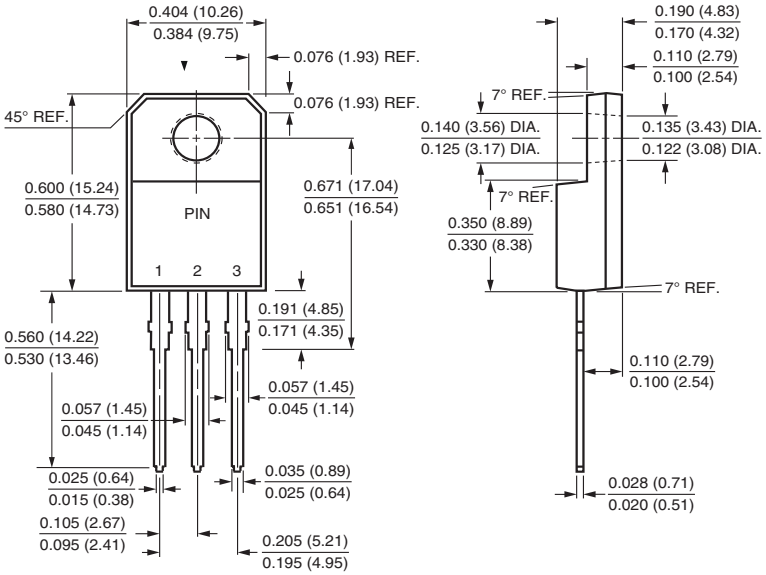
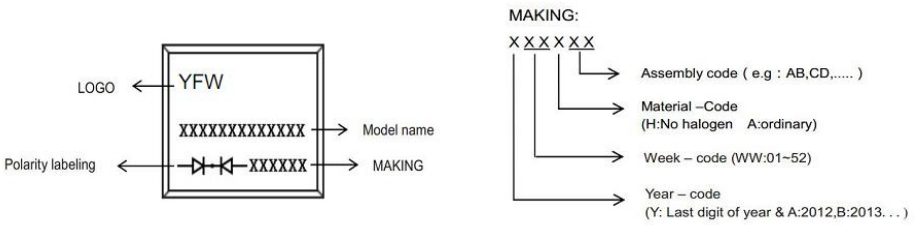
Package Outline TO-220AB



ITO-220AB



Marking on the body



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
TO-220AB	Tube	50/1000/5000	EIA-481-1
ITO-220AB	Tube	50/1000/5000	EIA-481-1

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