

Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 100 V

Forward Current - 10 A

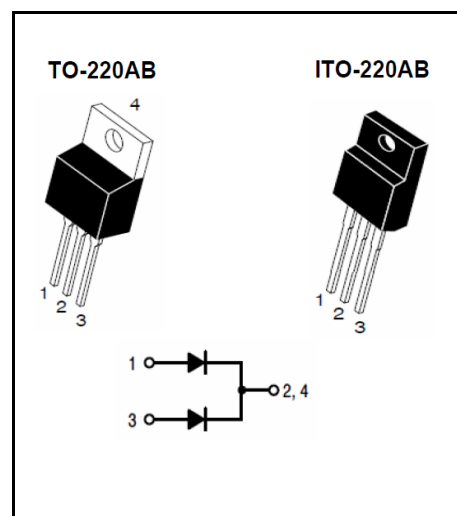
FEATURES

- ◆ 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 diode	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	160	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.

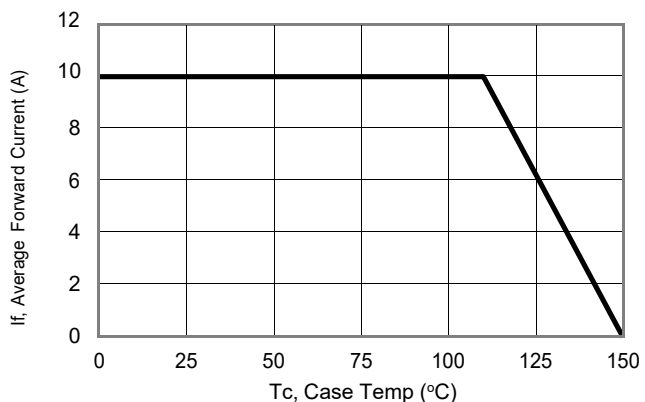
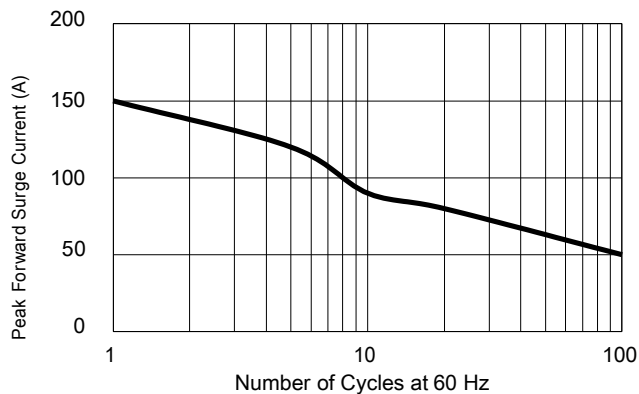
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at $I_F=2A$ Instantaneous forward voltage per diode	TA=25°C		0.44	-	
	TA=125°C		0.39	-	
at $I_F=10A$ Instantaneous forward voltage per diode	TA=25°C		0.63	0.70	
	TA=125°C		0.58	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	-	60	uA
	TA=125°C		-	40	mA

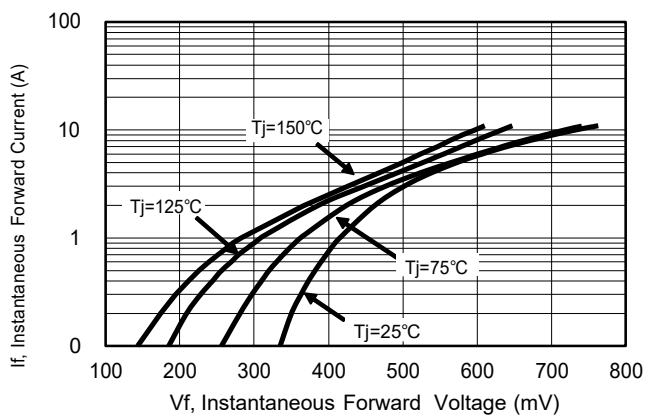
Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width $\leq$ 40 ms

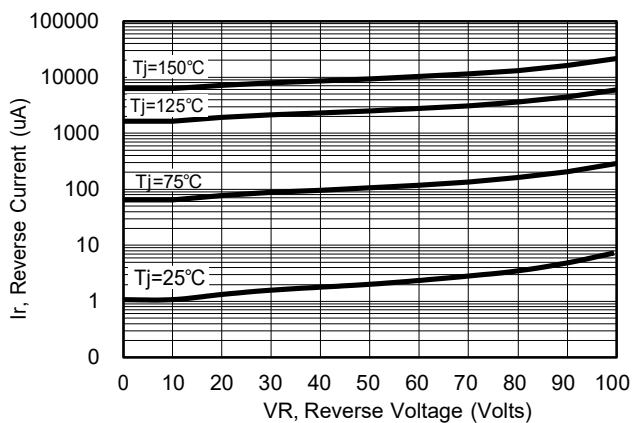
RATINGS AND CHARACTERISTIC CURVES



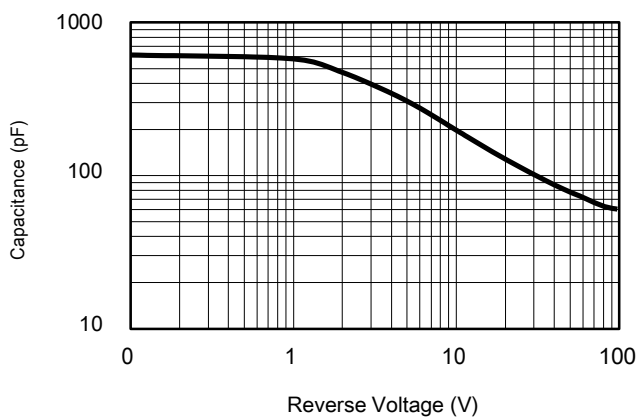
Current Derating, Case



Maximum Repetitive Surge Current



Typical Forward Voltage

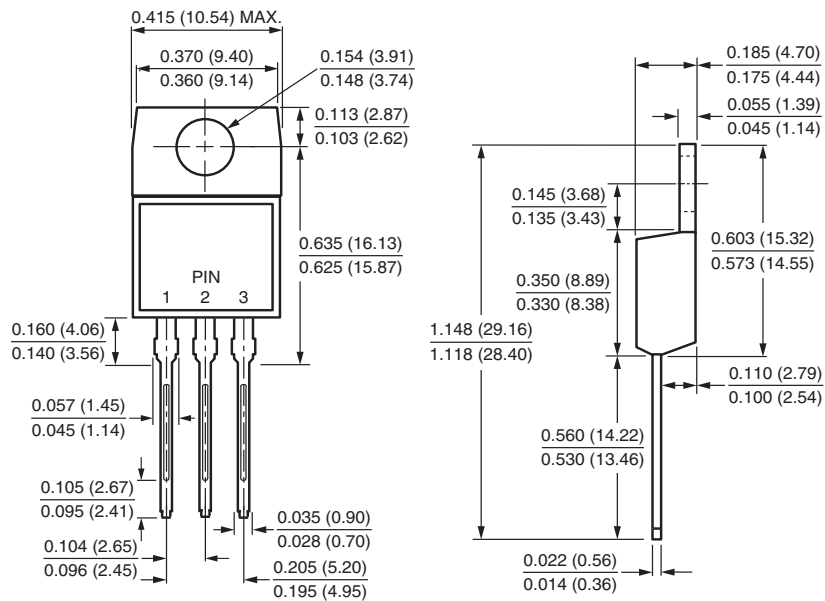


Typical Reverse Current

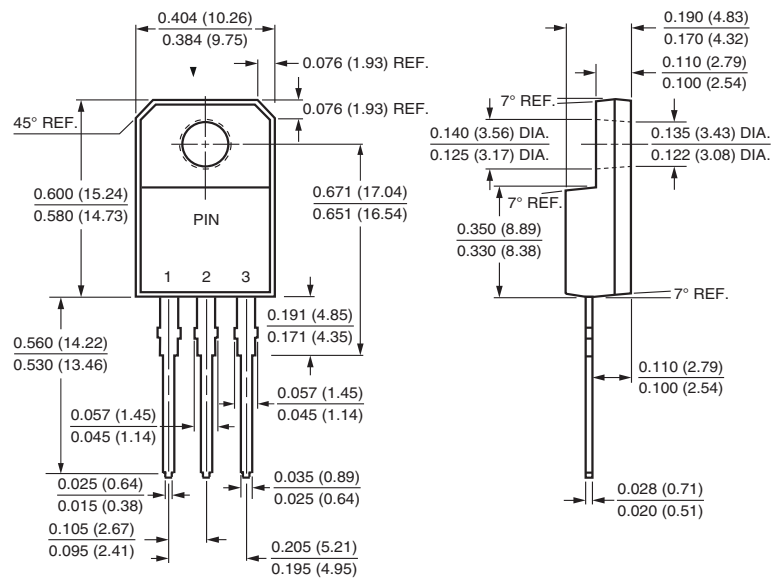
Typical Junction Capacitance



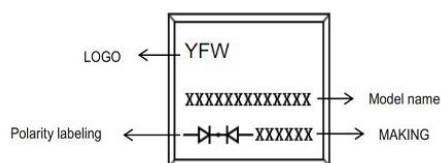
Package Outline TO-220AB



ITO-220AB



Marking on the body



MAKING:

XXXXXX

- Assembly code (e.g : AB,CD,.....)
- Material - Code (H:No halogen A:ordinary)
- Week - code (WW:01~52)
- Year - code (Y: Last digit of year & A:2012,B:2013, ...)

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