

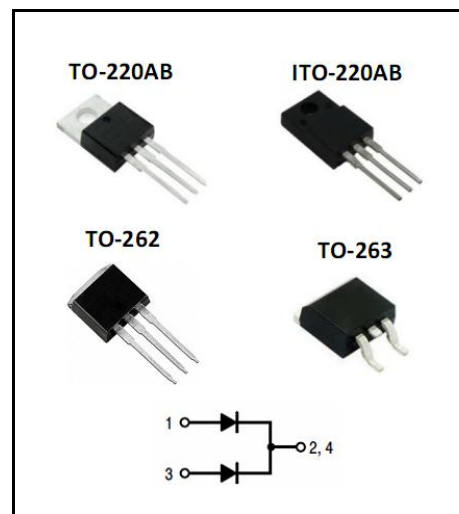
Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 300 V

Forward Current - 16 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/TO-262/TO-263
- ◆ 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}	300	V
Maximum RMS voltage		V_{RMS}	300	V
Maximum DC Blocking Voltage		V_{DC}	300	V
Maximum Average Forward Rectified Current	Per device	$I_{F(AV)}$	16	A
	Per diode		8	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	100	A
Operating Temperature Range		T_J	-65 ~ +150	°C
Storage Temperature Range		T_{STG}	-65 ~ +150	°C
Typical Thermal Resistance Per diode(mounted on FR-4 PCB)	TO-220AB/TO-263	$R_{\theta JC}$	2	°C/W
	ITO-220AB/TO-262		4	°C/W

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

Electrical Characteristics (Per Leg) unless otherwise specified

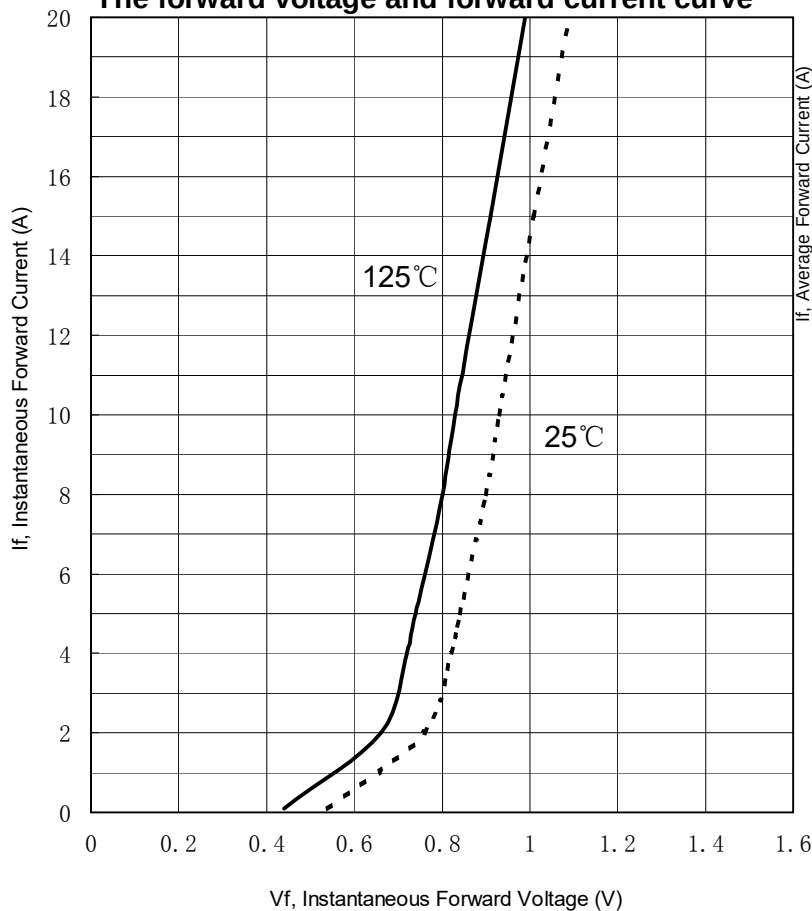
Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at $I_F=5A$ Instantaneous forward voltage per diode	TA=25°C		-	0.85	
	TA=125°C		-	0.72	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	-	200	uA
	TA=125°C		-	20	mA

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

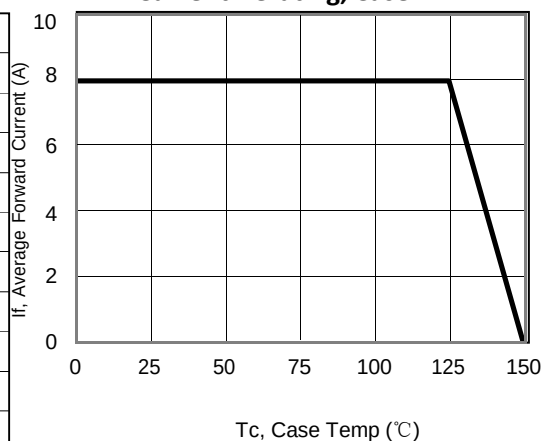
(2) Pulse test: Pulse width $\leq$ 40 ms

RATINGS AND CHARACTERISTIC CURVES

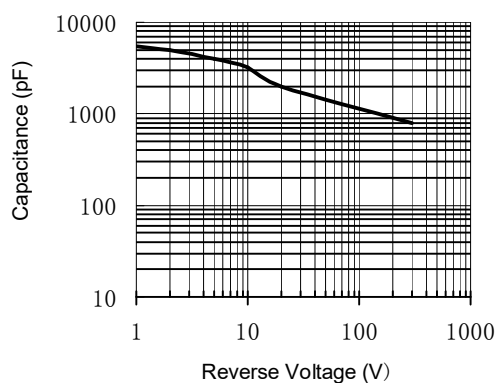
The forward voltage and forward current curve



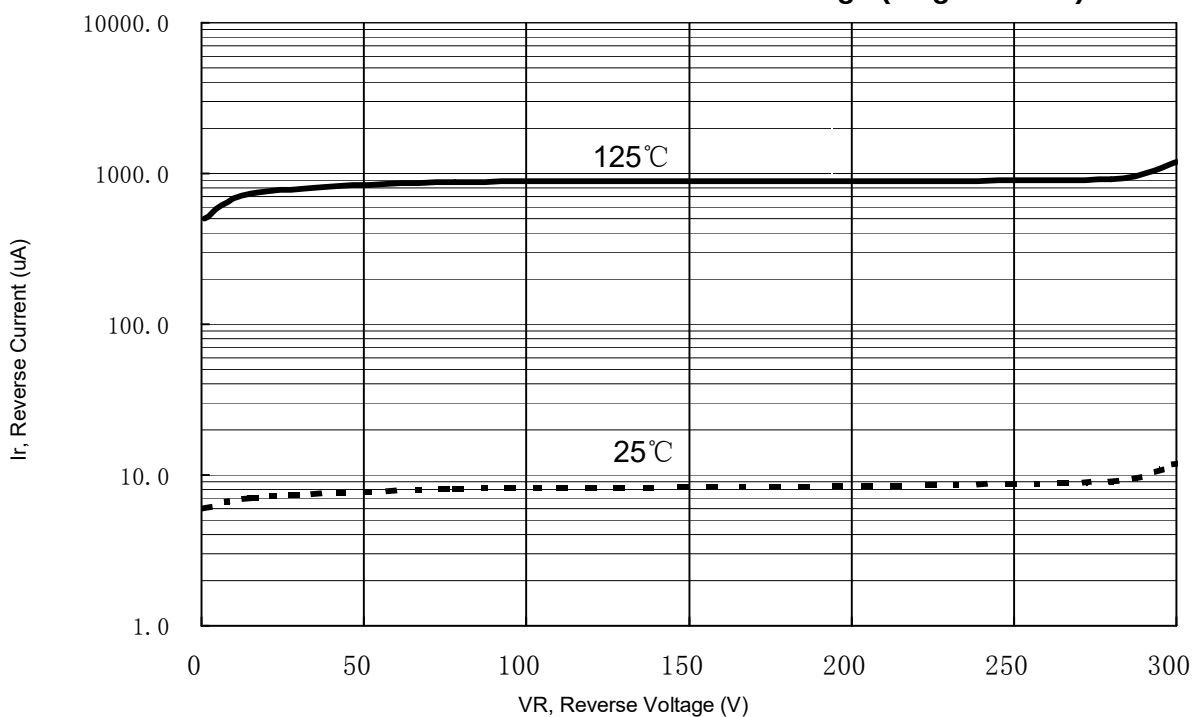
Current Derating, Case



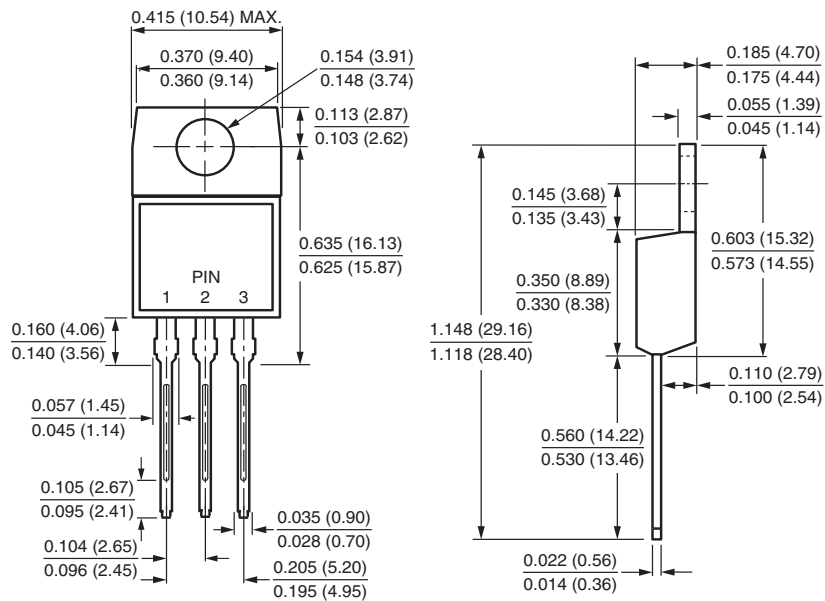
The crunode capacitance curve



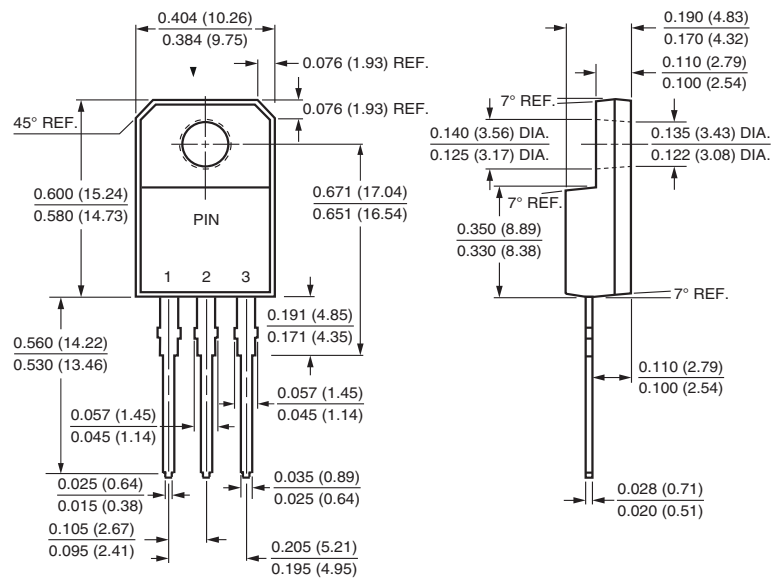
The reverse leak current and the reverse voltage (single-device) curve.



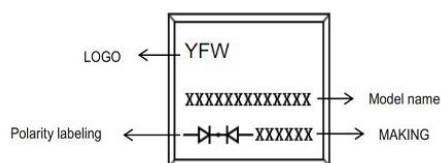
Package Outline TO-220AB



ITO-220AB



Marking on the body



MAKING:

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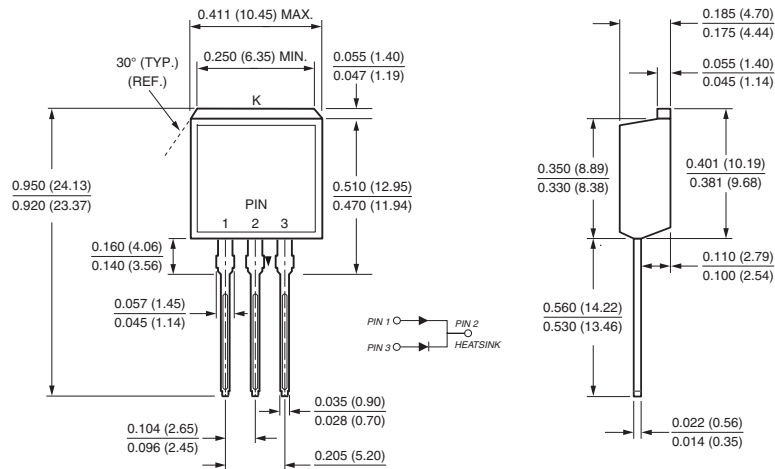
- Assembly code (e.g.: AB,CD,.....)
- Material - Code (H:No halogen A:ordinary)
- Week - code (WW:01-52)
- Year - code (Y: Last digit of year & A:2012,B:2013,...)

Summary of Packing Options

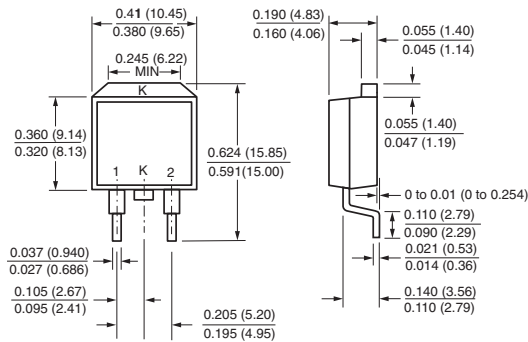
Package	Packing Description	Packing Quantity	Industry Standard
TO-220AB	Tube	50/1000/5000	EIA-481-1
ITO-220AB	Tube	50/1000/5000	EIA-481-1

Package Outline

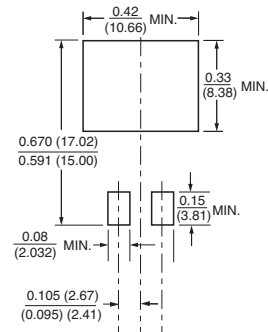
TO-262AA



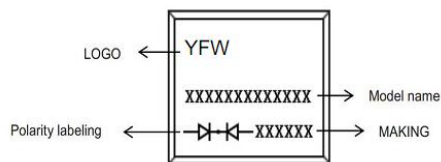
TO-263



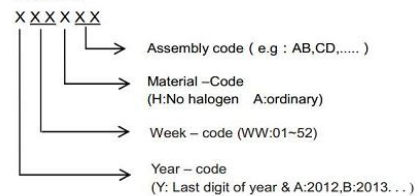
Mounting Pad Layout



Marking on the body



MAKING:



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
TO-262AA	Tube	50/1000/5000	EIA-481-1
TO-263	Tube	50/1000/5000	EIA-481-1