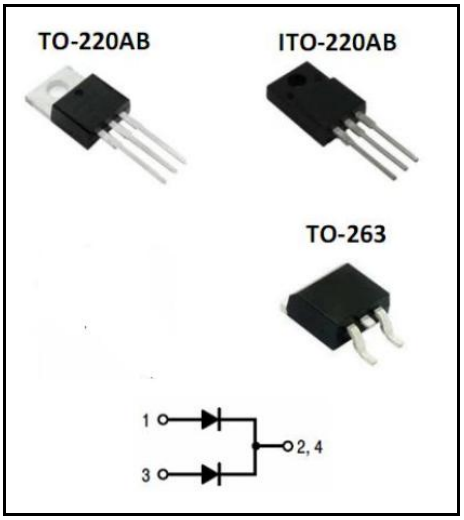
Trench MOS Barrier Schottky Rectifier

Reverse Voltage - 60 V

Forward Current - 60 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/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}	60	V
Maximum RMS voltage		V_{RMS}	60	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current	Per device	$I_{F(AV)}$	60	A
	Per diode		30	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode		I_{FSM}	280	A
Operating Temperature Range		T_J	-50 ~ +150	°C
Storage Temperature Range		T_{STG}	-50 ~ +150	°C
Typical Thermal Resistance Per diode(munted on FR-4 PCB)	TO-220AB/TO-263	$R_{\theta JC}$	2	°C/W
	ITO-220AB		4	°C/W

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

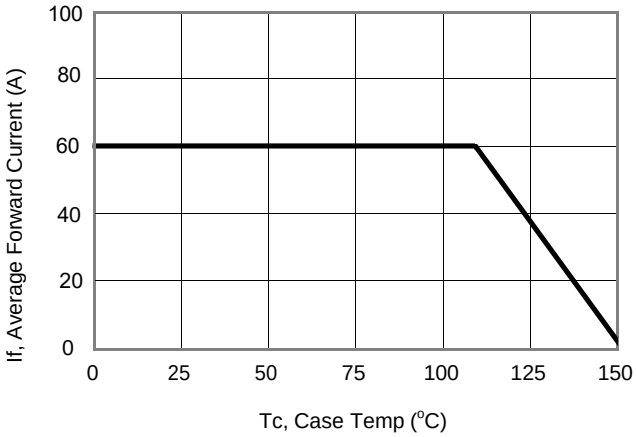
Electrical Characteristics (Per Leg) unless otherwise specified

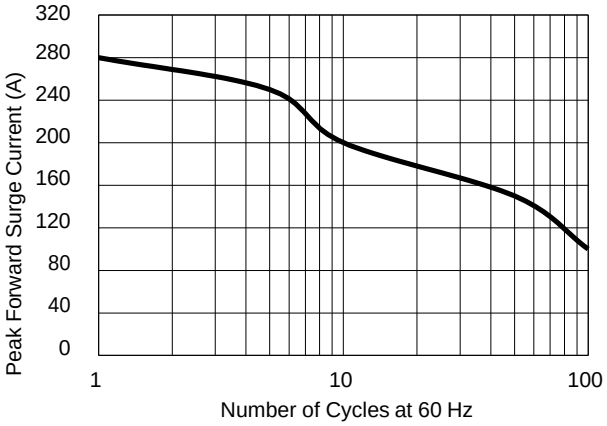
Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I_F=10A Instantaneous forward voltage per diode	TA=25°C		0.45	-	
	TA=125°C		0.41	-	
at I_F=30A Instantaneous forward voltage per diode	TA=25°C		-	0.65	
	TA=125°C		-	0.70	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	-	150	uA
	TA=125°C		-	30	mA

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

Download from alldatasheet.com

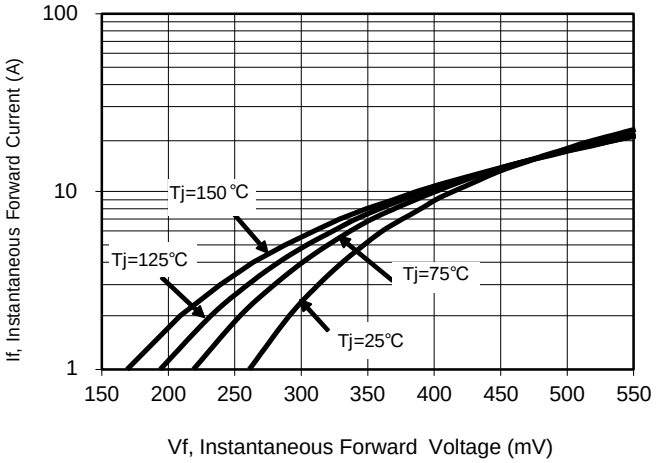
RATINGS AND CHARACTERISTICS CURVES (TA = 25 ˚C unless otherwise noted)

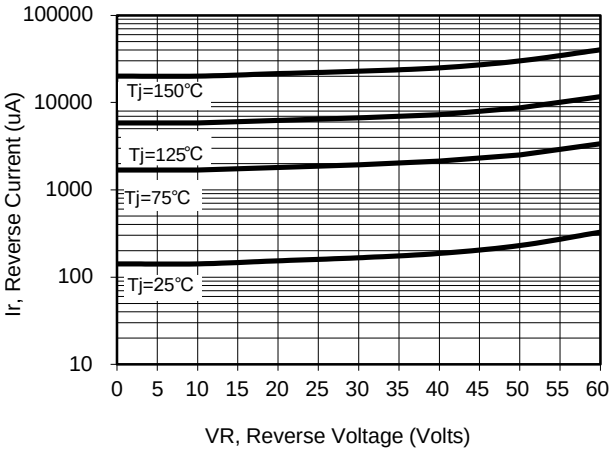




Current Derating, Case

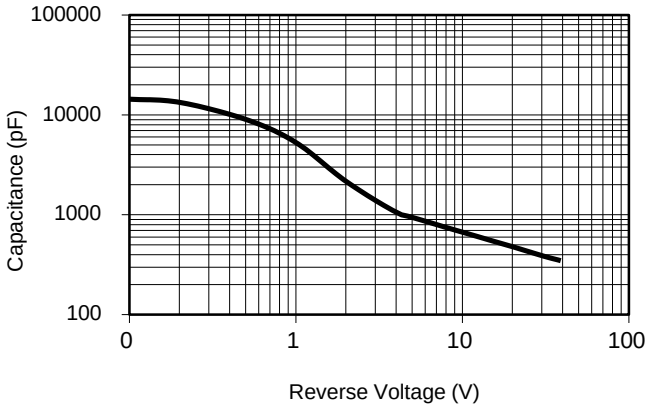
Maximum Repetitive Surge Current





Typical Forward Voltage

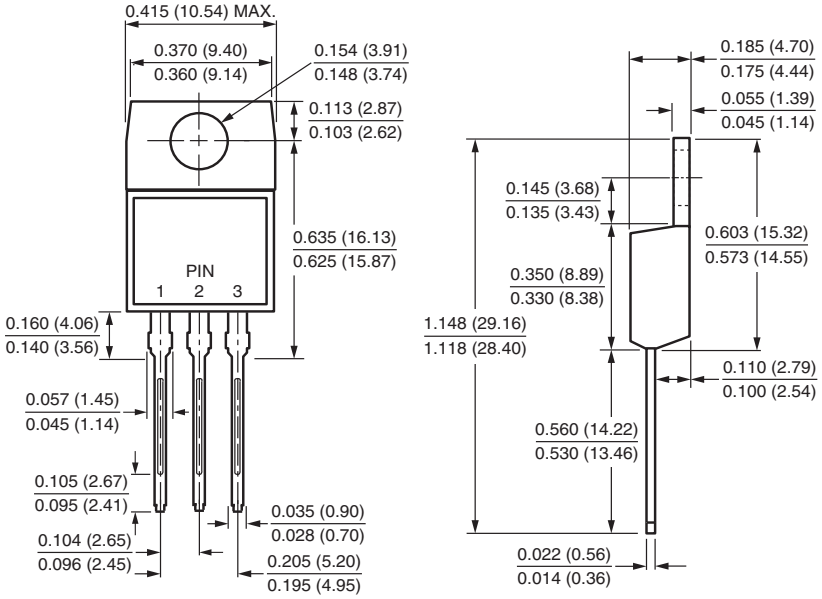
Typical Reverse Current



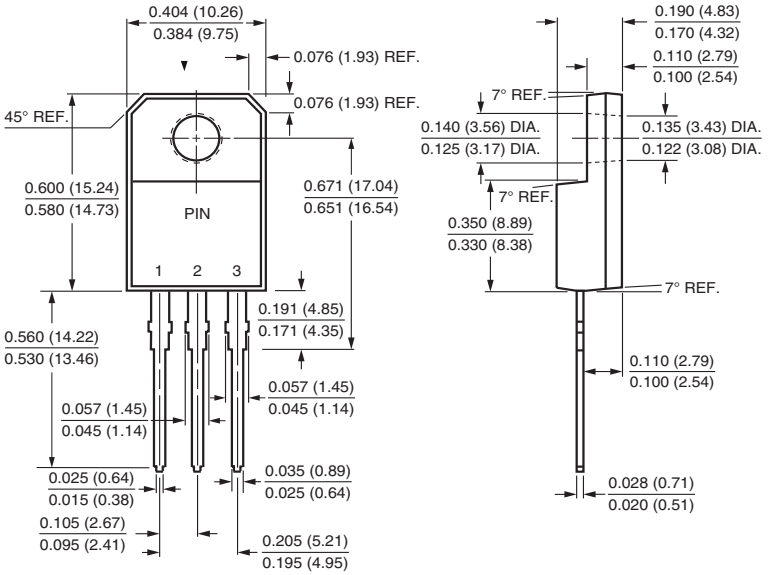
Typical Junction Capacitance

Download from alldatasheet.com

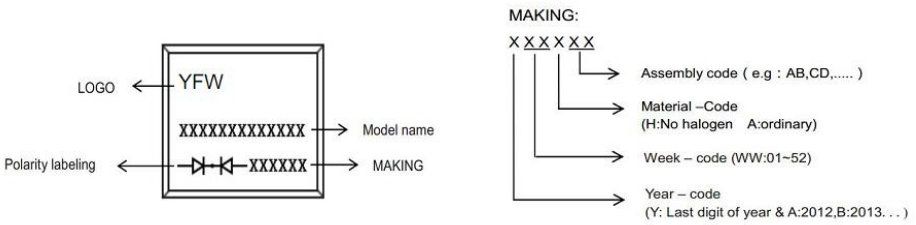
Package Outline TO-220AB



ITO-220AB



Marking on the body

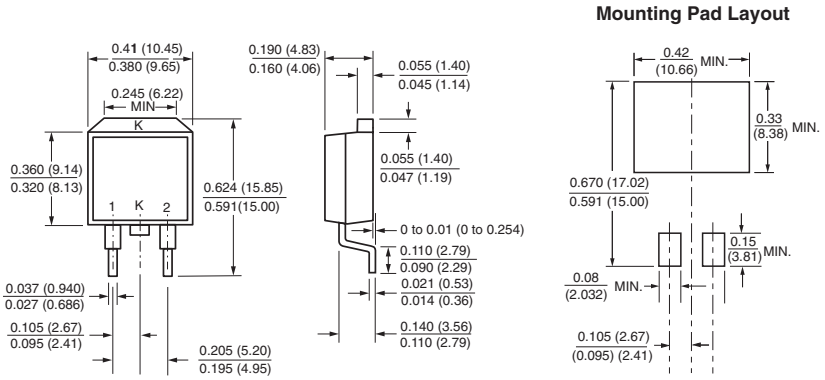


Summary of Packing Options

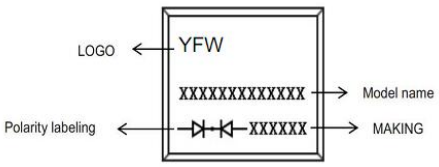
Package	Packing Description	Packing Quantity	Industry Standard
TO-220AB	Tube	50/1000/5000	EIA-481-1
ITO-220AB	Tube	50/1000/5000	EIA-481-1

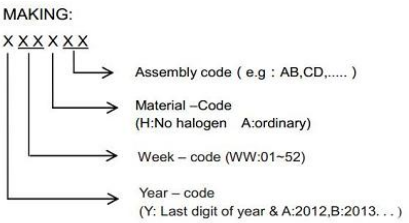
Download from alldatasheet.com

Package Outline TO-263



Marking on the body





Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
TO-263	Tube	50	EIA-481-1

Download from alldatasheet.com