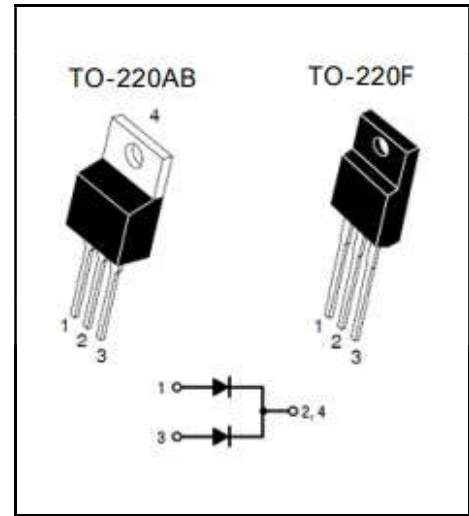


Trench MOS Barrier Schottky Rectifier
Reverse Voltage - 300 V
Forward Current - 30 A
FEATURES

- ◆Very low forward voltage
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses, High efficiency
- ◆Guarding for over voltage protection
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: TO-220AB/CT TO-220F/FCT
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106


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}	210	V
Maximum DC Blocking Voltage		V_{DC}	300	V
Maximum Average Forward Rectified Current	Per Leg	I_o	15	A
	Total		30	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave		I_{FSM}	280	A
Operating Temperature Range		T_J	-65 ~ +175	°C
Storage Temperature Range		T_{STG}	-65 ~ +175	°C
Typical Thermal Resistance ^(Note1) TO-220AB, TO-220F		$R_{\theta JA} / R_{\theta JC}$	2/4	°C/W

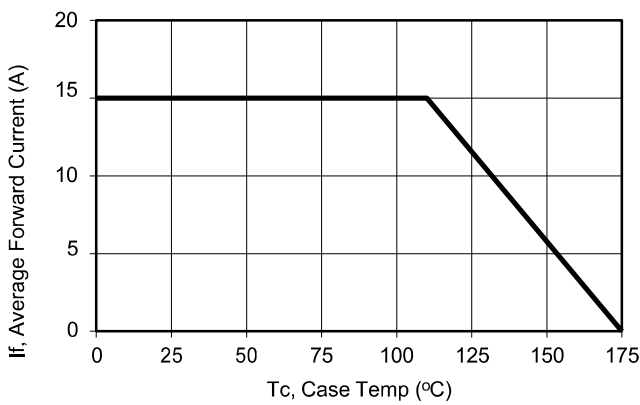
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at $I_F=5A$	TA=25°C		0.76	-	
	TA=125°C		0.65	-	
at $I_F=15A$	TA=25°C		0.85	0.95	
	TA=125°C		-	0.88	
Maximum Reverse Current at $V_R=300V$	TA=25°C	I_R	1	10	uA
	TA=125°C		-	5	mA

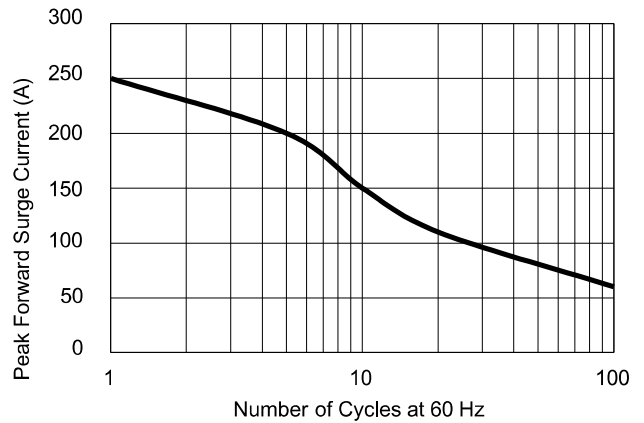
Note2: Pulse test: 300 μs pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTIC CURVES

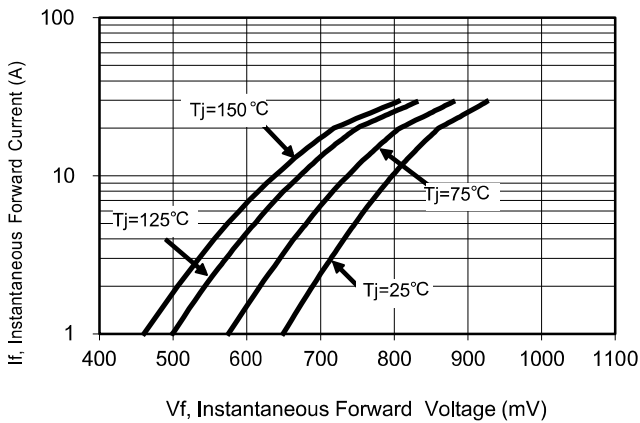
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



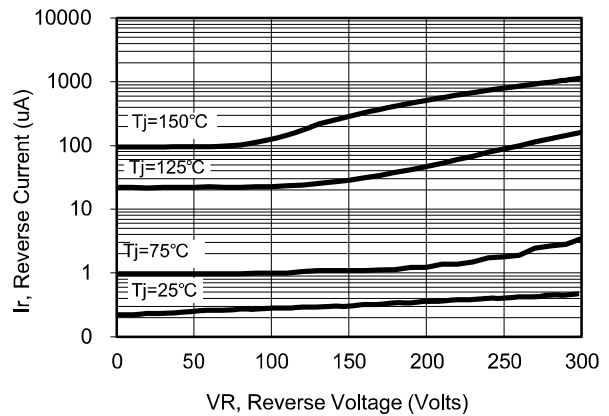
Current Derating, Case



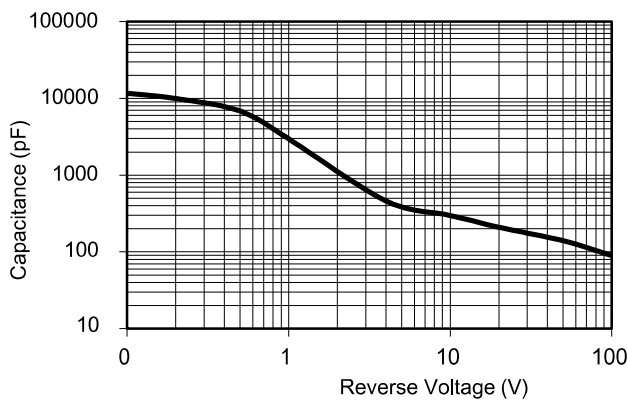
Maximum Repetitive Surge Current



Typical Forward Voltage



Typical Reverse Current



Typical Junction Capacitance

Package Outline Dimensions millimeters

TO-220AB

Dim.	Min.	Max.
A	10.15	10.35
B	2.65	2.95
C	3.70	3.90
D	28.5	29.5
E	1.30	1.45
F	6.35	6.55
G	2.9	3.3
H	15.0	16.0
I	0.38	0.42
J	4.45	4.55
K	1.25	1.35
L	Typ 5.08	
M	Typ 2.54	
N	3.1	3.3
O	0.76	0.84
All Dimensions in millimeter		

TO-220F

Dim.	Min.	Max.
A	9.95	10.25
B	2.95	3.25
C	1.25	1.45
D	12.95	13.25
E	0.50	0.65
F	3.1	3.3
G	1.30	1.45
H	Typ 2.54	
I	Typ 5.08	
J	4.60	4.75
K	2.50	2.65
L	6.35	6.55
M	15.4	16.0
N	2.75	3.05
O	0.48	0.52
P	0.76	0.84
All Dimensions in millimeter		