

Trench MOS Barrier Schottky Rectifier
Reverse Voltage - 120 V
Forward Current - 20 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 TO-263/DC
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106


Primary Characteristic

I_o	2*10A
V_{RRM}	120V
I_{FSM}	160A
V_F	0.66V
T_J Max	150°C

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

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	120	V
Maximum RMS voltage	V_{RMS}	120	V
Maximum DC Blocking Voltage	V_{DC}	120	V
Maximum Average Forward Rectified Current	Per Leg	10	A
	Total	20	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	160	A
Operating Temperature Range	T_J	-50 ~ +150	°C
Storage Temperature Range	T_{STG}	-50 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB, TO-263 TO-220F	R_{θJA}/ R_{θJC}	2/4	°C/W

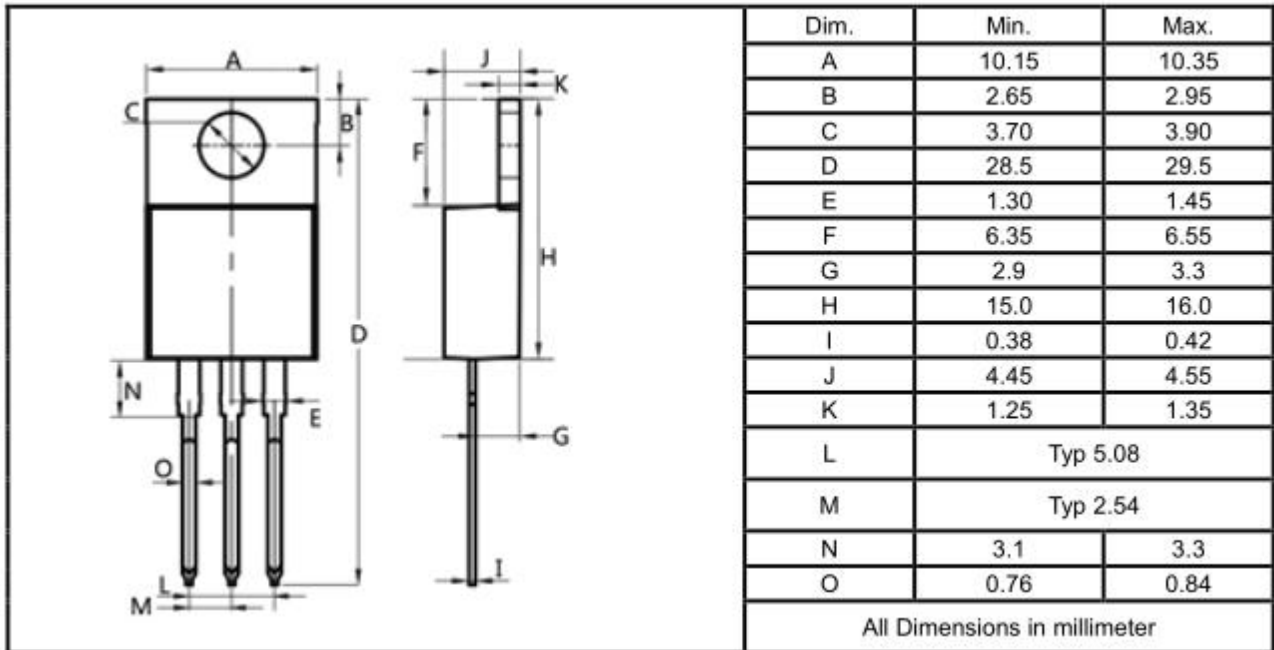
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbols	Value		Units	
		Typ	Max		
Forward Voltage Drop(Note2)	V_F	0.56	-	V	
at I _F =3A					TA=25°C
		TA=125°C			
at I _F =5A		TA=25°C	0.65		0.69
		TA=125°C	0.57		-
at I _F =10A		TA=25°C	0.79		0.86
	TA=125°C	0.66	-		
Maximum Reverse Current at V _R =120V	I_R	3	30	uA	
		1.2	-	mA	

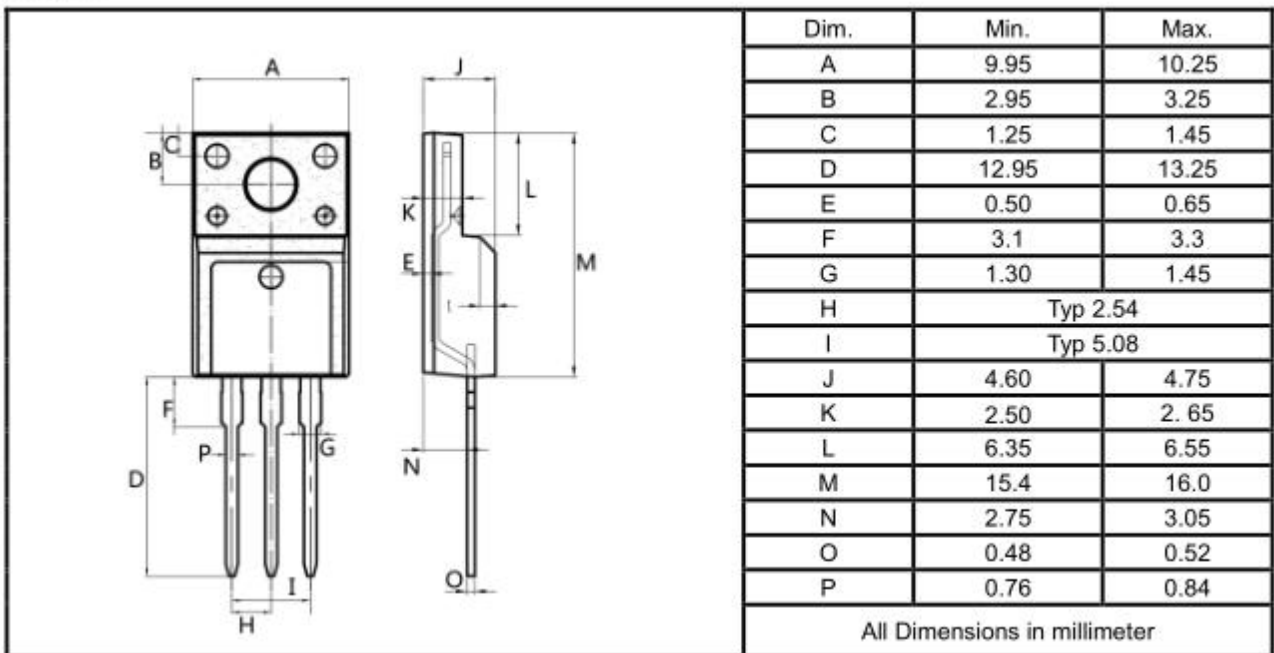
Note2: Pulse test: 300 μs pulse width, 1 % duty cycle

Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

