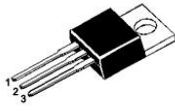
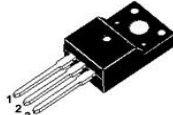


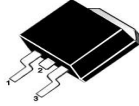
SCHOTTKY BARRIER RECTIFIER



TO-220AB/CT



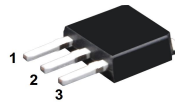
TO-220F/FCT



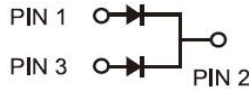
TO-263/DC



TO-252/CS



TO-251/D



FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection



APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_O	2*5A
V_{RRM}	200V
I_{FSM}	130A
V_F	0.72V
T_{jmax}	150°C
Assembly code	AE

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-

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

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RWM}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	I_O	Per Leg 5	A
		Total 10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	130	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	TO-220AB,TO-263,TO-252 2	°C/W
TO-220F		4	

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

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =2A	TA=25°C		0.77	-	
	TA=125°C		0.63	-	
at I _F =3A	TA=25°C		0.80	-	
	TA=125°C		0.67	-	
at I _F =5A	TA=25°C		0.85	0.92	
	TA=125°C		0.72	-	
Maximum Reverse Current at V _R =200V	TA=25°C	I _R	1	5	μA
	TA=125°C		0.5	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

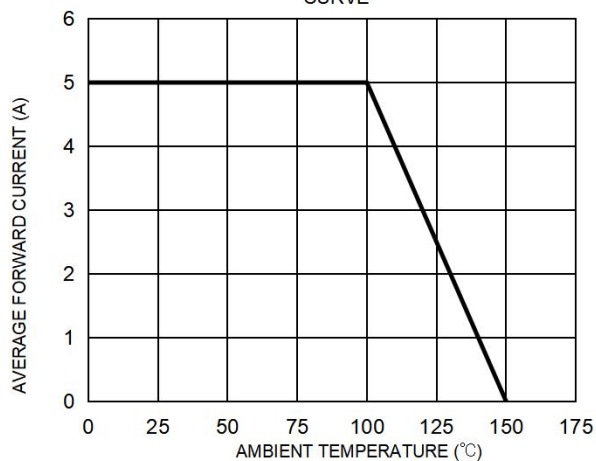


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

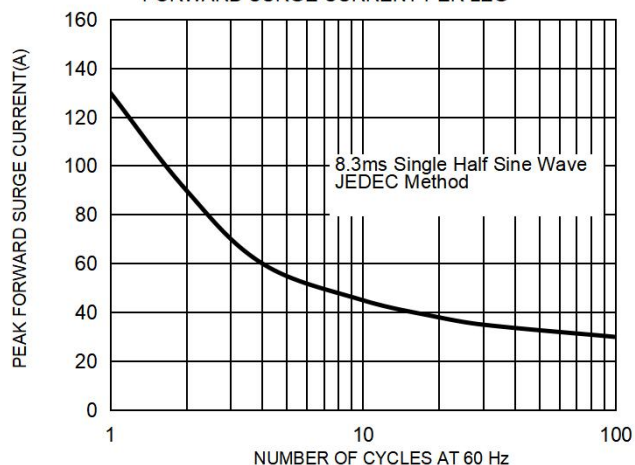


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

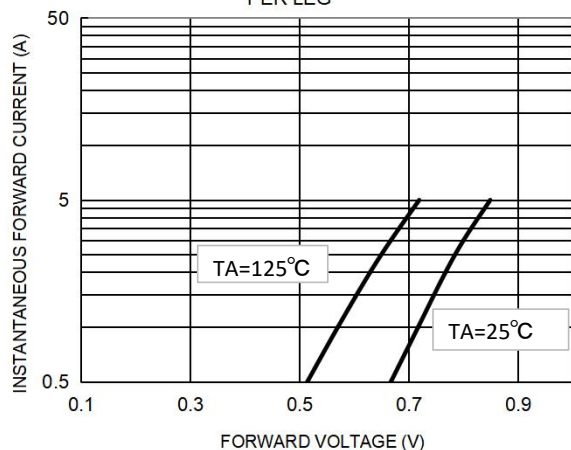
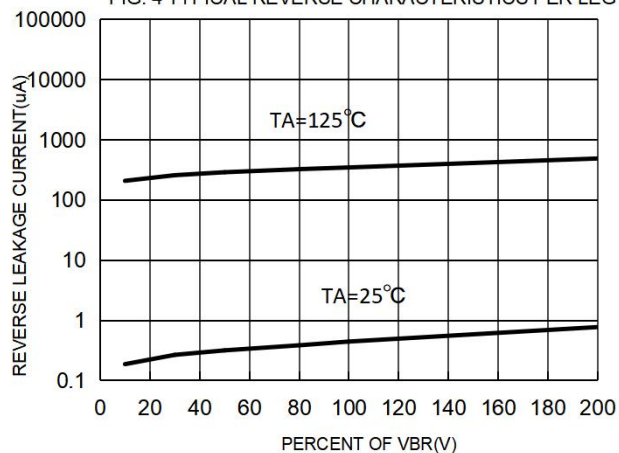
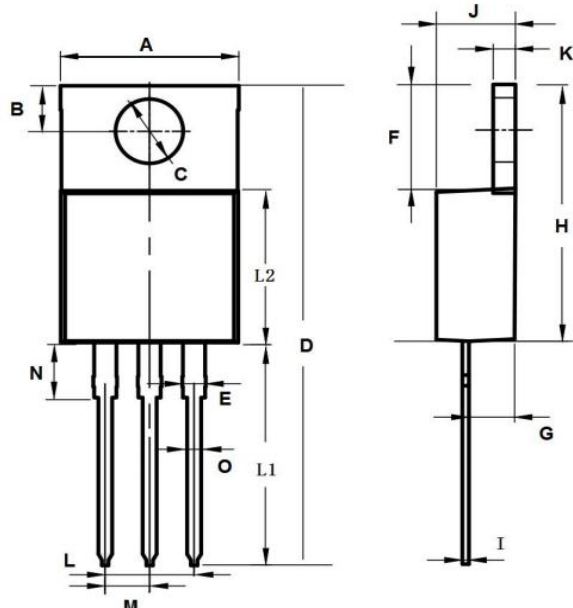


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

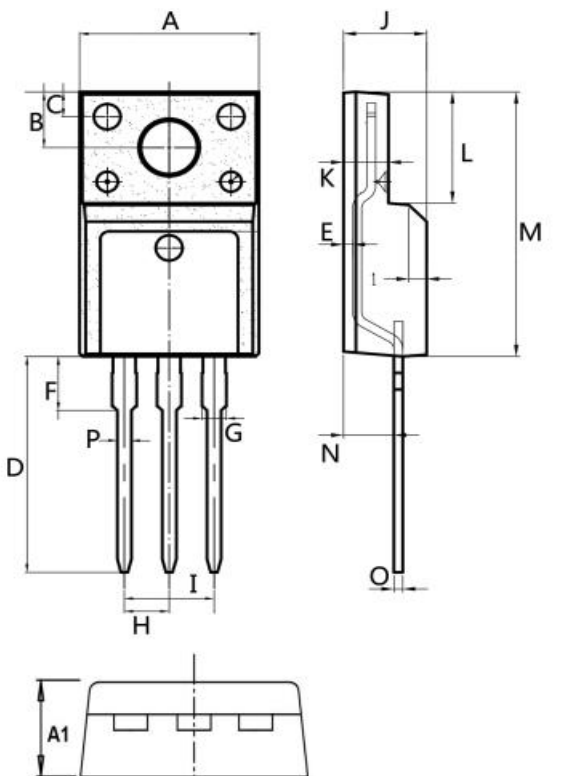


Package Outline Dimensions millimeters

TO-220AB

	Dim.	Min.	Max.
	A	10.15	10.35
	B	2.50	2.95
	C	3.70	3.90
	D	28.5	29.5
	E	1.20	1.40
	F	6.20	6.55
	G	2.85	3.25
	H	15.0	16.0
	I	0.35	0.42
	J	4.3	4.55
	K	1.2	1.4
	L	Typ5.08	
	L1	13	14
	L2	8.5	9.5
	M	Typ2.54	
	N	2.8	3.5
	O	0.70	0.90
All Dimensions in millimeter			

TO-220F

	Dim.	Min.	Max.
	A	9.95	10.35
	A1	4.5	5.0
	B	2.95	3.25
	C	1.25	1.45
	D	12.65	12.95
	E	0.40	0.60
	F	2.8	3.5
	G	1.30	1.45
	H	Typ 2.54	
	I	Typ 5.08	
	J	4.60	4.75
	K	2.45	2.65
	L	6.45	6.85
	M	15.4	16.0
	N	2.75	3.05
	O	0.45	0.55
	P	0.70	0.90
All Dimensions in millimeter			

Package Outline Dimensions millimeters

TO-263

	Dim.	Min.	Max.
	A	10.10	10.35
	B	6	8
	C	1.2	1.5
	D	0.55	1.0
	E	4.3	5.3
	F	1.4	1.6
	G	0.75	0.85
	H	1.2	1.5
	I	Typ2.54	
	J	8.5	9.5
	K	4.3	4.55
	L	1.25	1.35
	M	0.02	0.23
	N	2.2	2.8
	O	0.3	0.4
All Dimensions in millimeter			

TO-252

	Dim.	Min.	Max.
	A	2.1	2.5
	A1	6.3	6.9
	B	0.95	1.55
	B1	0.6	0.8
	B2	0.75	0.95
	C	Typ0.5	
	D	5.3	5.5
	D1	3.65	4.05
	E	5.8	6.4
	E1	Typ2.3	
	E2	Typ4.6	
	O	0	0.15
	L1	9	11
	L2	Typ1.5	
	L3	0.7	1.0
All Dimensions in millimeter			

Package Outline Dimensions millimeters

T0-251

