

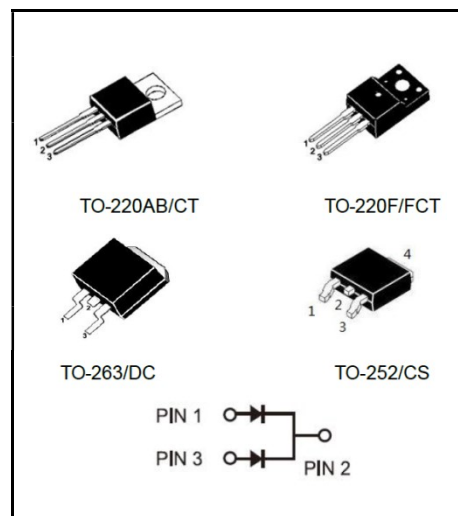
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 80 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
- ♦LeadfreeincomplywithEUROHS2011/65/EUdirectives



MECHANICAL DATA

- ♦Case:TO-220AB/CT TO-220F/FCT TO-263/DC TO-252/CS
- ♦Solder bath temperature275°C maximum,10s per JESD22-106

Primary Characteristic

I_o	2*10A
V_{RRM}	80V
I_{FSM}	200A
V_F	0.75V
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}	80	V
Maximum RMS voltage		V_{RMS}	80	V
Maximum DC Blocking Voltage		V_{DC}	80	V
Maximum Average Forward Rectified Current	Per Leg	I_o	10	A
	Total		20	
Peak Forward Surge Current, 8.3ms SingleHalf Sine-wave		I_{FSM}	200	A
Operating Temperature Range		T_J	-50 ~ +150	°C
Storage Temperature Range		T_{STG}	-65 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263TO-220F TO252		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
Forward Voltage Drop(Note2)		V_F	Typ	Max	V
at I _F =10A	TA=25°C		0.72	0.78	
	TA=125°C		0.65	-	
at I _F =20A	TA=25°C		0.80	0.85	
	TA=125°C		0.75	-	
Maximum Reverse Current at V _R =60V	TA=25°C	I_R	3	50	uA
	TA=125°C		-	50	mA

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

RATINGS AND CHARACTERISTIC CURVES

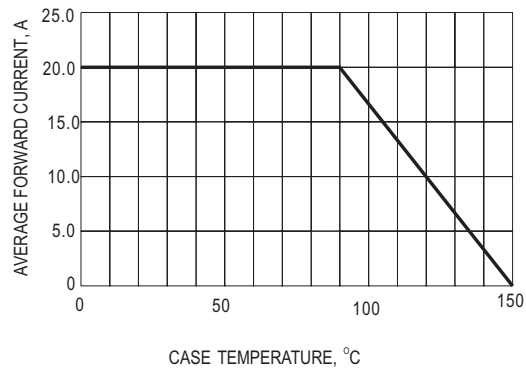


Fig.1- FORWARD CURRENT DERATING CURVE

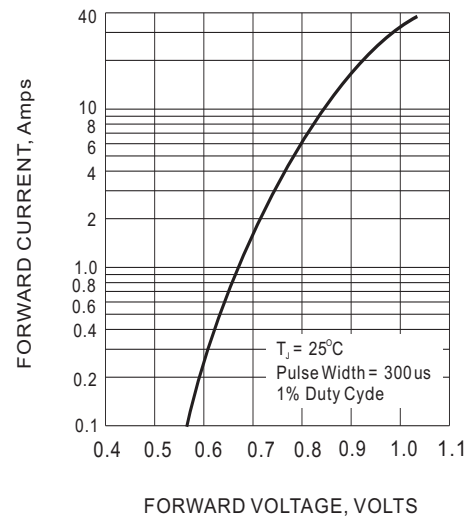


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

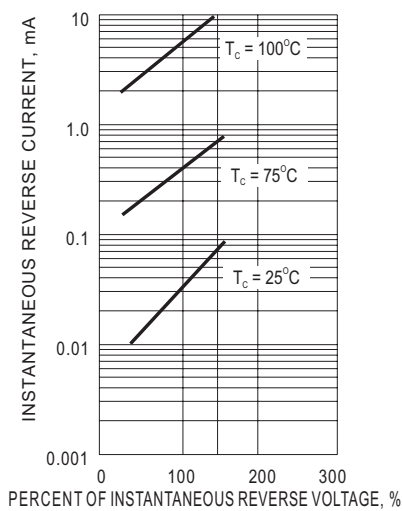


Fig.3- TYPICAL REVERSE CHARACTERISTIC

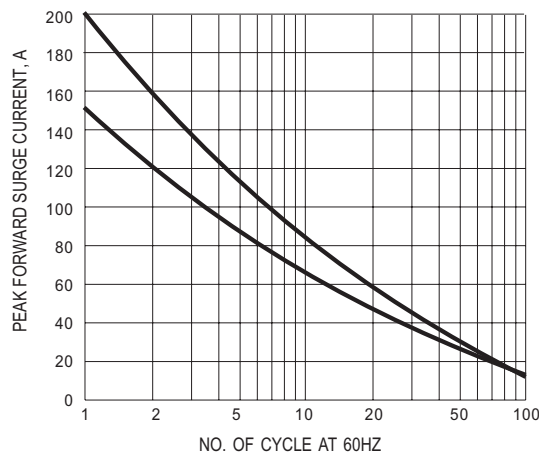


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

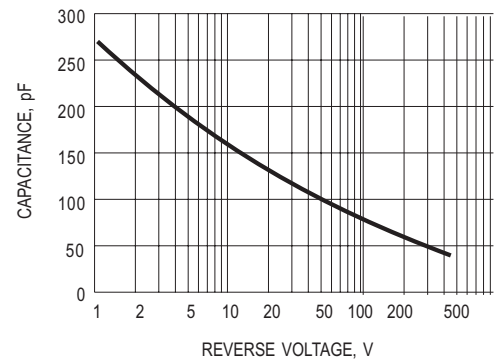
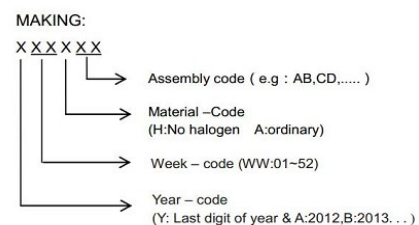
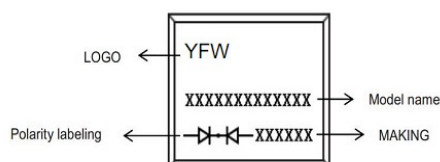


Fig.5- TYPICAL JUNCTION CAPACITANCE

Marking on the body



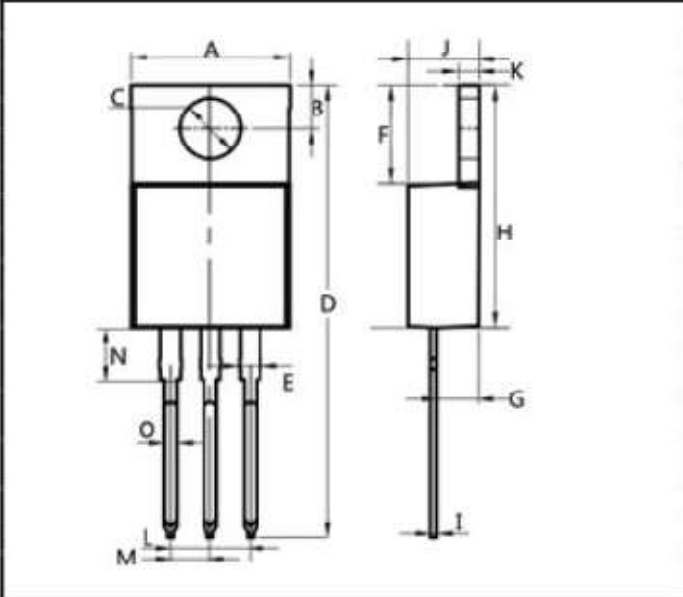
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR2080CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR2080FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR2080DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR2080DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box4000pcs/carton
MBR2080CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	2500pcs/box 12500pcs/carton

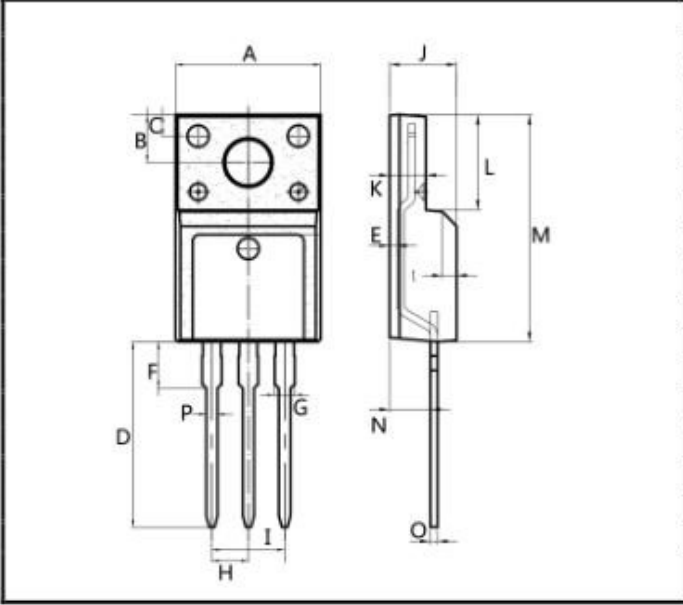
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

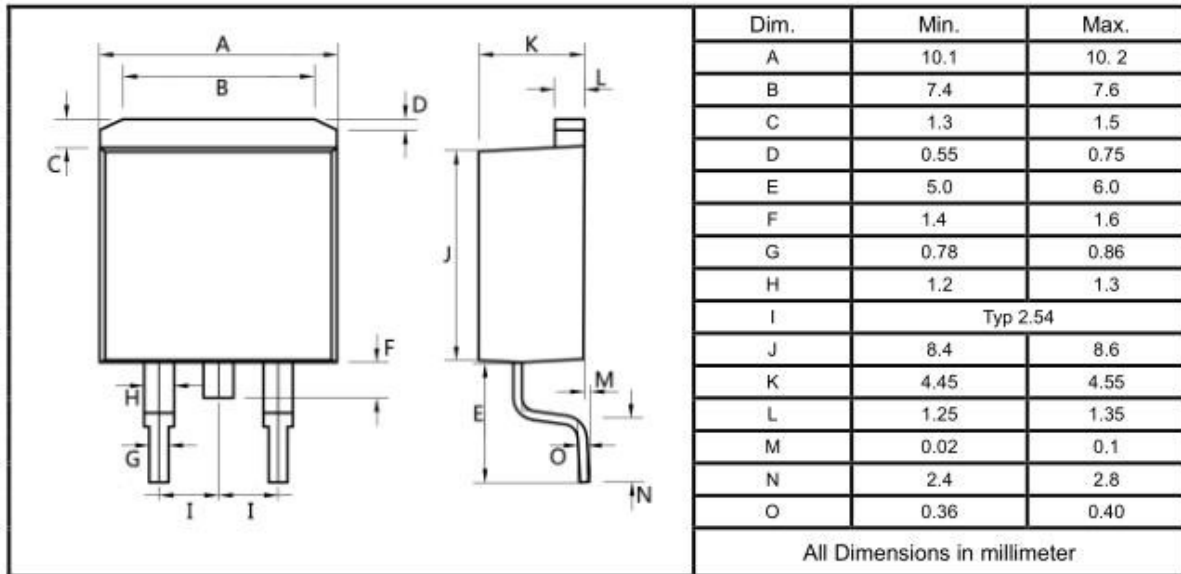
TO-220AB

	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			

TO-263



TO-252

