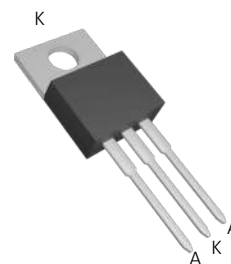


MBR60170CT Schottky Barrier Diode

Features

High frequency operation
High Junction temperature Low leakage current
High reliability
RoHS product

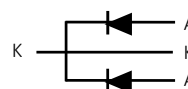
Package



Mechanical Data

Molding compound meets UL 94 V-0 flammability rating,
RoHS-compliant
Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
Polarity: As marked on body

TO-220AB



Maximum ratings

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V _{RRM}	170	V
Average forward current	I _{F(AV)}	60 30	A
Non-repetitive single pulse surge current t=8.3ms	I _{FSM}	300	A
Junction temperature	T _j	-55~+175	°C
Storage temperature	T _{STG}	-55~+175	°C

Electrical characteristics(T_c=25°C)

Parameter	Tests conditions		Value			Unit
			(min)	(typ)	(max)	
V _{RRM}	I _R =0.05mA		170	-	-	V
I _R	T _j =25°C	V _R =V _{RRM}	-	-	0.05	mA
	T _j =125°C		-	-	10	
V _F	T _j =25°C	I _F =30A	-	-	0.95	V
	T _j =125°C	I _F =1A	-	0.40	-	
		I _F =15A	-	0.65	-	
		I _F =30A	-	0.72	-	

Thermal characteristics(T_c=25°C)

Parameter	Symbol	Value	Unit
Thermal resistance from junction to case	R _{th(j-c)}	2.5	°C/W

Typical Characteristic Curve

FIG 1: I_F - T_C

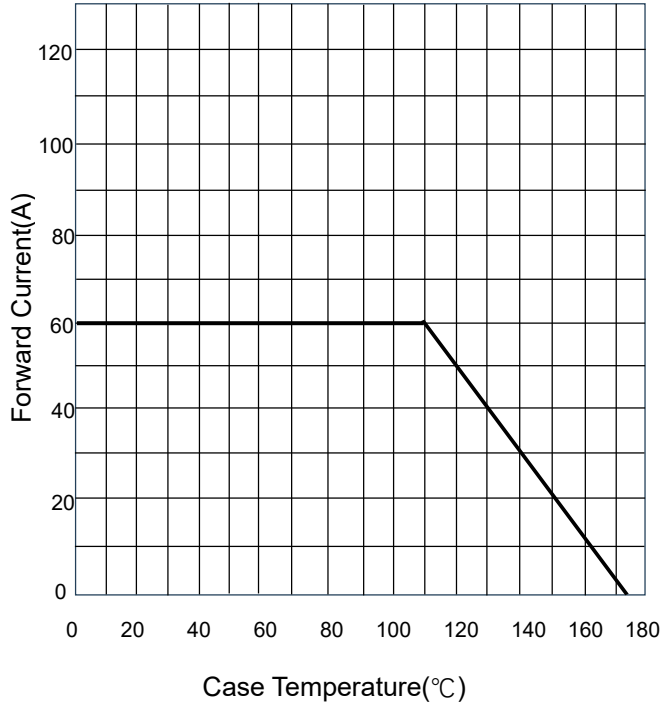


FIG 2: Surge Forward Current Capability

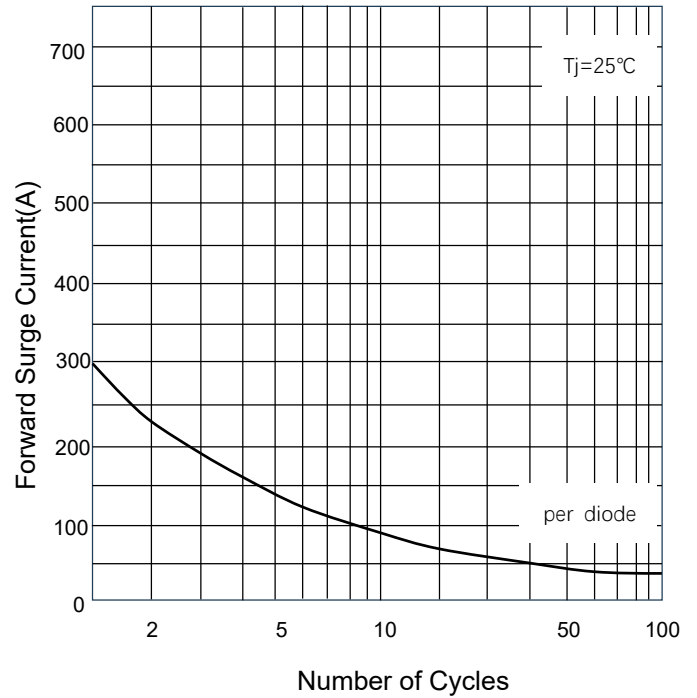


FIG 3: V_R - I_R

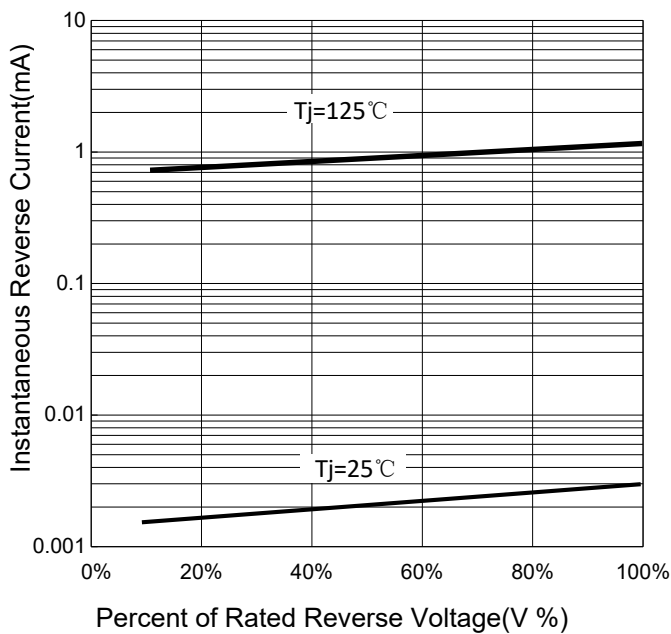
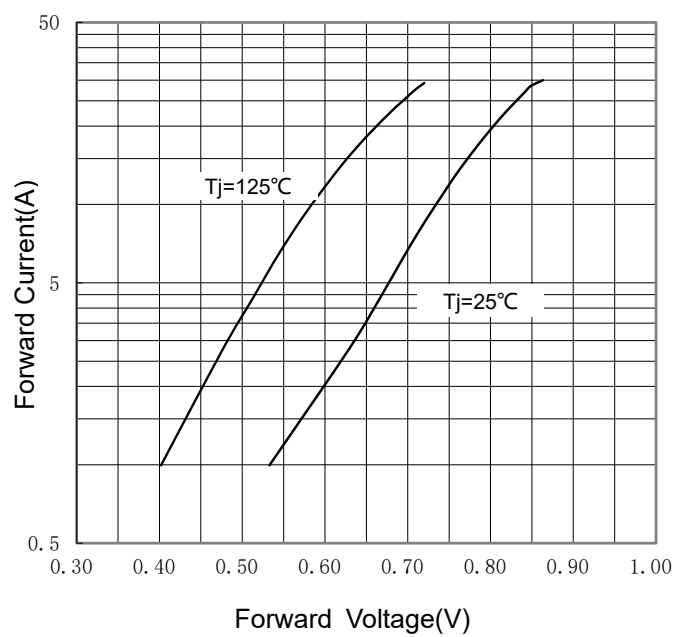
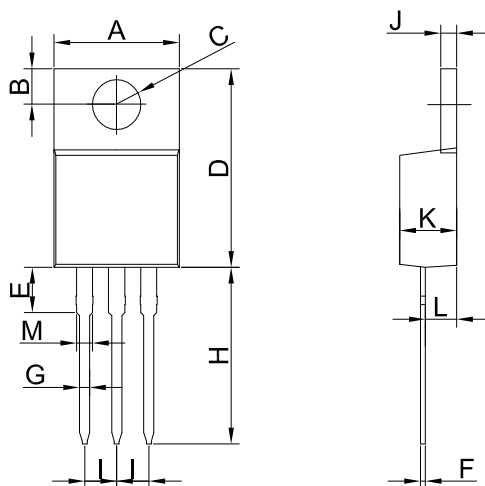


FIG 4: I_F - V_F



Outline Dimensions and Pad Layout Reference

TO-220AB



Dim	Min	Typ	Max
A	9.80	10.10	10.40
B	2.60	2.74	2.90
C	3.69	3.84	3.99
D	14.95	15.25	15.55
E	3.50	3.80	4.10
F	0.28	0.38	0.48
G	0.60	0.80	1.00
H	13.30	13.60	13.90
I	2.44	2.54	2.64
J	1.17	1.27	1.37
K	4.30	4.50	4.70
L	2.30	2.50	2.70
M	1.10	1.30	1.50
(mm) Dimensions in millimeters			