

■ PRODUCT CHARACTERISTICS

$V_R @ I_C = 0.5mA$	300V
$V_F (Typ @ I_F = 5A)$	0.82V
$I_R (@ V_R = 300V)$	50uA
I_D	10A

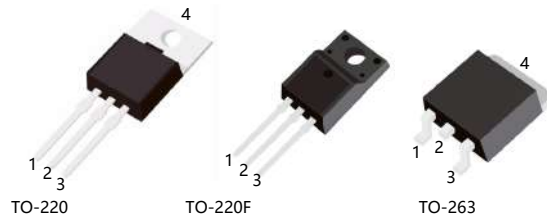
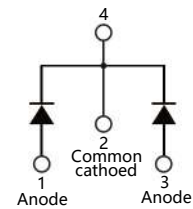
■ APPLICATION

Case epoxy molded
 Leds are readily solderable

■ FEATURES

Guard ring for stress protection
 Low forward voltage
 Low power loss high efficiency
 High surge capacity
 Pb free packages are available

Symbol


■ ORDER INFORMATION

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MBR10300F	TO-220F	50pieces/Tube
N/A	MBR10300A	TO-220	50pieces/Tube
N/A	MBR10300E	TO-263	800pieces/Reel

■ MAXIMUM RATINGS(Each diode leg)

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_R	300	V
Average rectified output current	Total	10	A
	Pre leg	5	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate Ioda	I_{FSM}	150	A
Operating and storage temperature range	T_J, T_{STG}	-55 to 175	°C

■ ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	V_R	$I_C = 0.5mA, T_J = 25^\circ C$	300	-	-	V
Forward voltage drop	V_F	$I_F = 5A, T_J = 25^\circ C$	-	0.82	0.86	V
Leakage current	I_R	$V_R = 300V, T_J = 25^\circ C$	-	-	0.05	mA
		$V_R = 300V, T_J = 125^\circ C$	-	-	6	mA

■ TYPICAL CHARACTERISTICS

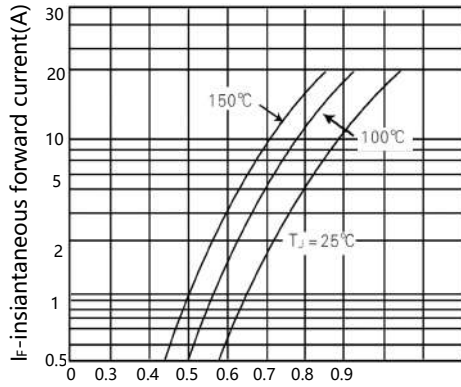


Figure 2 typical forward voltage per diode

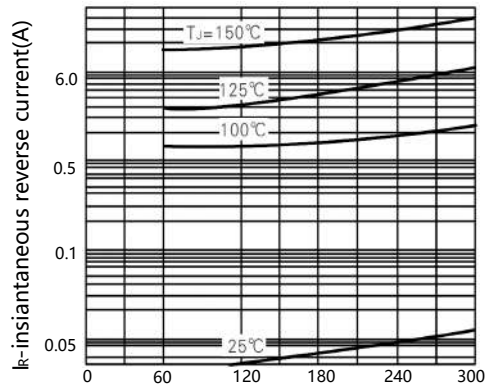


Figure 2 typical reverse current per diode

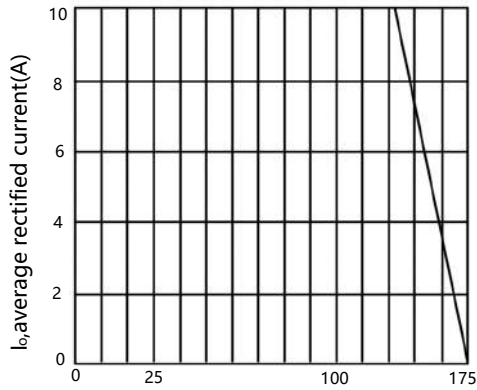


Figure 3 forward current derating curve

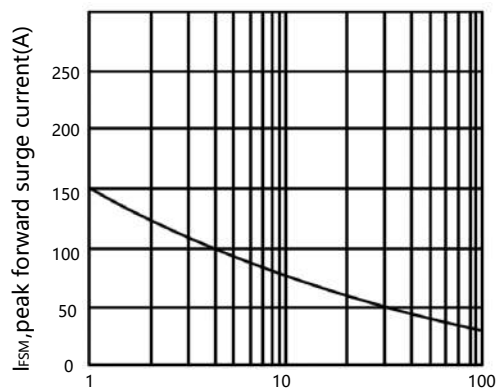
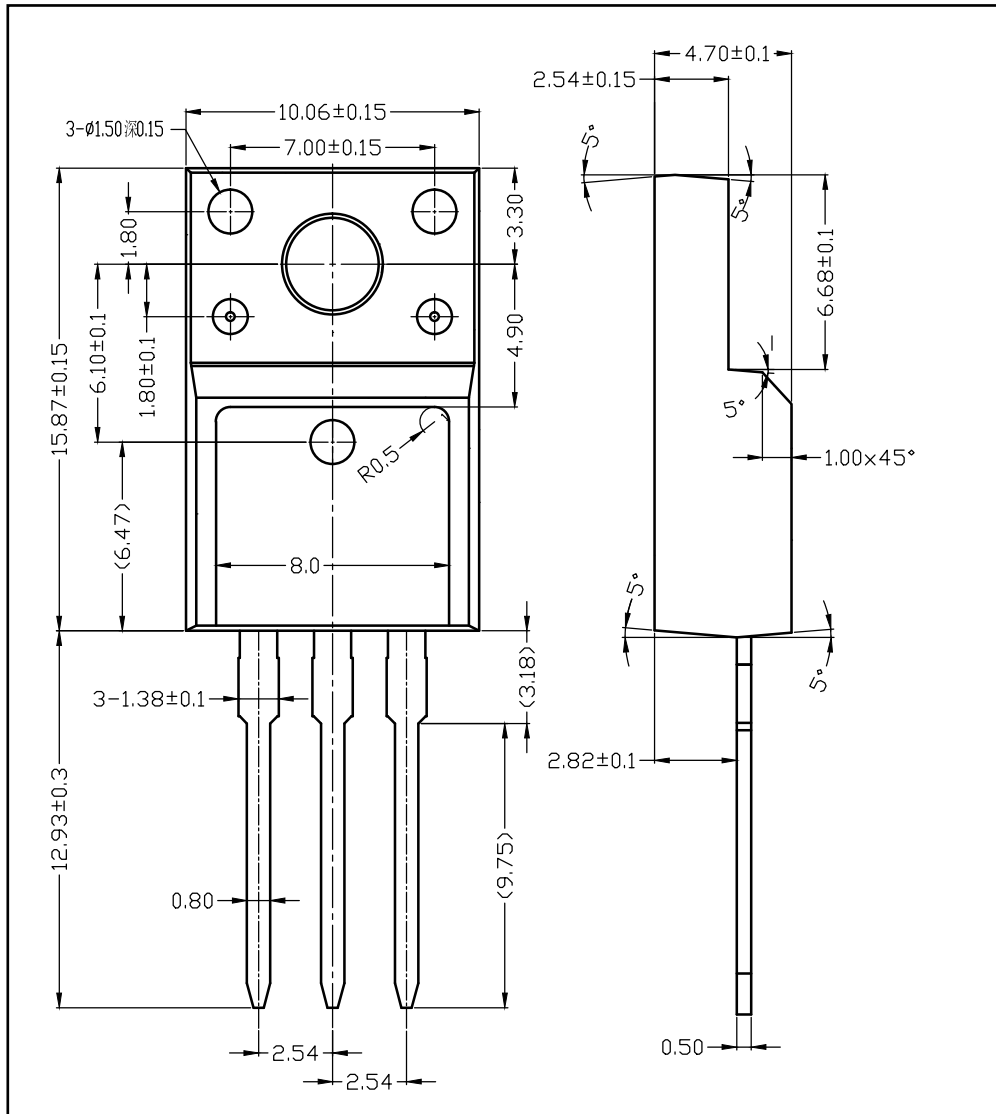


Figure 4 max non-repetitive surge current

■ TO-220F-3L PACKAGE OUTLINE DIMENSIONS



■ TO-263-2L PACKAGE OUTLINE DIMENSIONS

