

用途：主要应用于开关电路，如：固体继电器、温控器、马达驱动和马达调速控制、相位控制调光器。

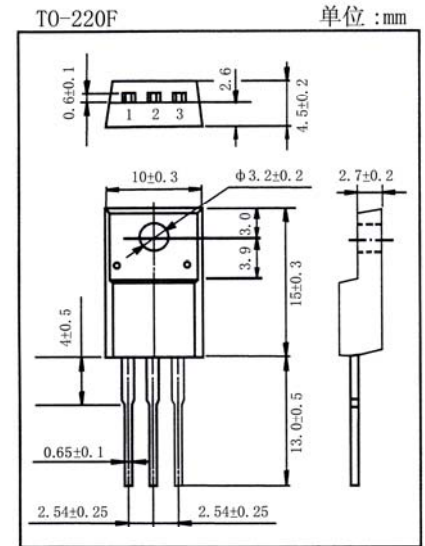
Purpose: They can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits or phase control operation in light dimmers, motor speed controllers.

特点：转换效率高、采用全塑封装绝缘电压高符合 UL 标准。

Features: High commutation performances .By using a plastic envelope series provides voltage insulated tab complying with UL standards

极限参数/Absolute maximum ratings(Ta=25°C)

参数符号 Symbol	测试条件 Test condition	数值 Rating	单位 Unit
V_{DRM}/V_{RRM}	$T_j=25^\circ\text{C}$	600, 700 and 800	V
$I_{T(RMS)}$	$T_c=100^\circ\text{C}$	16	A
I_{TSM}	F=50Hz t=20ms	160	A
	F=60Hz t=16.7ms	168	A
I^2t	$t_p=10\text{ms}$	144	A^2s
dI/dt	F=120Hz $T_j=125^\circ\text{C}$	50	$\text{A}/\mu\text{s}$
I_{GM}	$T_p=20\mu\text{s}$ $T_j=125^\circ\text{C}$	4	A
$P_{G(AV)}$	$T_j=125^\circ\text{C}$	1	W
T_{stg}		-40~150	$^\circ\text{C}$
T_j		-40~125	$^\circ\text{C}$
$R_{th(j-a)}$		60	$^\circ\text{C}/\text{W}$
$R_{th(j-c)}$		2.1	$^\circ\text{C}/\text{W}$



引脚：1.T1 2.T2 3.G

电性能参数/Electrical characteristics(Ta=25°C)

参数符号 Symbol	测试条件 Test condition	信号区 Quadrant		BTA16			单位 Unit
				SW	CW	BW	
$I_{GT}(1)$	$V_D=12\text{V}$ $R_L=33\Omega$	I-II-III	MAX.	10	35	50	mA
V_{GT}		I-II-III	MAX.	1.3			V
V_{GD}	$V_D=V_{DRM}$ $R_L=3.3\text{K}\Omega$ $T_j=125^\circ\text{C}$	I-II-III	MIN.	0.2			V
$I_H(2)$	$I_T=500\text{mA}$		MAX.	15	35	50	mA
I_L	$I_G=1.2I_{GT}$	I-III	MAX.	25	50	70	mA
		II		30	60	80	
$V_T(2)$	$I_{TM}=22.5\text{A}$ $t_p=380\mu\text{s}$	$T_j=25^\circ\text{C}$	MAX.	1.55			V
$V_{to}(2)$	Threshold voltage	$T_j=125^\circ\text{C}$		0.85			V
$R_d(2)$	Dynamic resistance	$T_j=125^\circ\text{C}$		25			$\text{m}\Omega$
I_{DRM}	$V_{DRM} = V_{RRM}$	$T_j=25^\circ\text{C}$		5			μA
I_{RRM}		$T_j=125^\circ\text{C}$		2			mA
$dV/dt(2)$	$V_D=67\% V_{DRM}$ gate open	$T_j=125^\circ\text{C}$	MIN.	40	500	1000	$\text{V}/\mu\text{s}$
$(dI/dt)_c(2)$	$(dV/dt)_c=0.1\text{V}/\mu\text{s}$	$T_j=125^\circ\text{C}$	MIN.	8.5			A/ms
	$(dV/dt)_c=10\text{V}/\mu\text{s}$	$T_j=125^\circ\text{C}$		3			
	Without snubber	$T_j=125^\circ\text{C}$			8.5	14	

Note 1: minimum I_{GT} is guaranteed 5% of I_{GT} max.

Note 2: for both polarities of T2 referenced to T1.

